UDRI Annual Report

UDRI

URBAN
DESIGN
RESEARCH
INSTITUTE

Contents

Data from SKB

FOREWORD

We are pleased to release our Annual Report for the year from April 2012 - March 2013.

The UDRI has continued to work relentlessly towards making Mumbai an open, efficient and inclusive city.

Given below, in brief, are some of the key achievements of the UDRI.

Existing Land Use plan (ELU) – In an historic first for Greater Mumbai, the MCGM threw open the Existing Land Use plan to the people of the city for their inputs. This was in large measure due to a sustained campaign by the UDRI and city stakeholders involving personal meetings with the MCGM and with one another, letters and media engagement. Through a series of reports and public meetings, the UDRI highlighted critical lapses in the ELU drawn up by the MCGM, details of which are in this Report. The ELU is THE key component for a holistic revision of the Greater Mumbai Development Plan 2014 – 2034.

Development Plan (DP) – The UDRI is working actively to ensure that the DP process is transparent and comprehensive. We have filed a number of Right To Information applications to obtain crucial documents related to the Plan. The UDRI has also prepared training materials for Corporators, which has been disseminated to them through network of stakeholders. Further advocacy efforts include training sessions with community based organizations and capacity building meetings with MCGM officials. The UDRI has assembled 12 groups of stakeholders covering the key areas to be addressed by the DP. We are in dialogue on these issues with about 250 NGOs and citizens' associations in Mumbai.

Social Media Presence – To ensure greater participation in the DP 2014, the UDRI scaled up its presence on the social media. Through Facebook and our blog called Plan Your Mumbai, we were able to communicate vital developments in the ELU process to people at large, very quickly.

Fort Management Plan (FMP) – The UDRI has continued to work on the implementation of the FMP. Complaints of commuters using the Fort Pheri were followed up with the BEST. A survey of the M.G. Road was undertaken so that a pilot pavement re-engineering project for access / use for all, particularly the differently abled, can be implemented.

Manori Gorai Uttan DP - Suggestions have been sent to key policy makers on the 10-year development plan for the Manori Gorai Uttan 2012-2022 plan. UDRI believes Manori Gorai Uttan presents a tremendous opportunity for addressing a significant part of Mumbai's low cost housing needs.

Education Outreach Campaigns – To encourage children to think and speak about their aspirations for Mumbai, the UDRI reached out to children across schools – both municipal and private – to create awareness about problems relating to basic amenities in a city such as water, sanitation, and housing, among others.

Research and Resource Centre – The UDRI continued, in 2012, to augment its Research and Resource Centre through acquisitions of books, periodicals, technical manuals, monographs etc. The selection of these resources focuses on areas of primary importance to the understanding of Development Planning in Mumbai, India and the rest of the world. The Research and Resource Centre continues to be an important place where students, academicians, visiting scholars and common citizens increased their understanding of Mumbai- centric issues.

Shirin Bharucha
Managing Trustee

Marathi Mumbai Reader 14

The Marathi Mumbai Reader 14 is the compilation of selected articles from English Mumbai Reader 09, 10, 13. The book was officially released on 26th February 2014. The book consists of 25 articles. We have translated 33 articles and 25 have been selected for the book.

The book officially got published on 26th February 2014 at Kitab Khana.

The below mentioned are the articles selected for the Marathi Mumbai Reader 14.

No:	Article	Author	Mumbai Reader	Translator
1	The Keeper of Faith	Gautam Patel	MR 13	Savita Damle
	Vanguard of Mumbai Heritage Movement Dead	Shalini Nair	MR 13	Meena Deval
2	Fort Management Plan	UDRI	MR 13	BITS Pvt Ltd
3	Revision of Development Plan	UDRI	MR 13	BITS Pvt Ltd
4	Coaxed, Cornered-How A Red-Faced BMC was forced to let the secret called the city's development plan processes, out to the city	Kunal Purohit	MR 13	BITS Pvt Ltd and Savita Damle

5	Manori Gorai Uttan Notified Area Development plan 2022	UDRI	MR 13	BITS Pvt Ltd
6	Those 80000 flats unsold	Ajit Ranade	MR 13	Savita Damle
7	Is Mumbai Growing Anymore?	Darryl D'Monte	MR 13	Vijaya Chauhan
8	Understanding Issues Related to Polycentric Goverance in the Mumbai Metropolitan Region	Abhay Pethe,Vaidehi Tandel, Sahil Gandhi	MR 13	Meena Deval
9	Changing Fortunes Of State Institutions-The era of projects and the Rise of MMRDA	Amita Bhide	MR 13	Vijaya Chauhan
10	The slum and The High Rise	Alpa Sheth	MR 13	Shrikant Sutar
11	In Search Of Women in History of Marathi Theatre, 1843 to 1933	Neera Adarkar	MR 13	Madhuri Dixit
12	You Bombay Girls Don't Know how good you have it	Sameera Khan	MR 13	Bits PVT LTD & Rohit Choudhary
13	Written into the city/ Writing the city	Shilpa Phadke	MR 13	Savita Damle
14	The production of Public	Prasad Shetty, Rupali Gupte	MR 13	Pratibha Gopujkar
15	Flood Mitigation in Mumbai-Rains, Drains and Delays	Gautam Pemmaraju	MR 13	Meena Deval
16	Culture Counts: Civic Activism in Mumbai	Nayana Kathpalia	MR 10	Vijaya Chauhan
17	A culture Policy Of Maharashtra	Aroon Tikekar	MR 10	Pratibha Gopujkar
18	A Joint enterprise- The Creation of a New Landscape in British Bombay	Preeti Chopra	MR 10	Hemant Karnik
19	Thackeray, a Close Ally of the Capitalists	Vidyadhar Date	MR 13	Prathiba Gopujkar
20	Three Decades of Living in Mumbai- Moments of Joy and Despair	R.N.Sharma	MR 10	Hemant Karnik
21	Diversity, complexity, conviviality-Propositions for Urban Development	Vyjayanthi Rao	MR 10	Hemant Karnik
22	Notes from the Fringes; A Brief Note on Mumbai Metropolitan Region	Sudha Mohan	MR 10	Savita Damle

23	Bombay, Or whats left of it	Mustansir Dalvi	MR 09	Vishakha Gokhale
24	The Paradox of Mumbai Mills Land Sales	Shalini Nair	MR 13	Savita Damle
25	Mumbai, arts and all	Shanta Gokhale	MR 13	Hemant Karnik

The evaluation of the articles is done by Mr Arvind Adarkar and the proof Reading is done by Damayanti Patil.

The graphic design of the book was created by Mr Gufran Shaikh.

We have printed 1000 copies through JAK Printers Private Ltd.

Quotations were received from the following Printers:

No:	Printer	Cost per book with tax	Cost of 1000 books with tax
1	JAK Printers Pvt Ltd	Rs 383.34	Rs 3,83,344.50
2	Silverpoint Press Pvt Ltd	Rs 451.122	Rs 4,51,123
3	Prodon Enterprises	Rs 456.75	Rs 4,56,750

Marathi Mumbai Reader 2014 (Distribution)

Particulars	Quantity Printed	Distribution
Quantity printed	1000	
Sale of Publication		13
Complimentary copies given		250
Stock at Andheri office		600
Stock at UDRI office		137
Total	**1000**	**1000**

Marathi Mumbai Reader 14 Launch at Kitab Khana
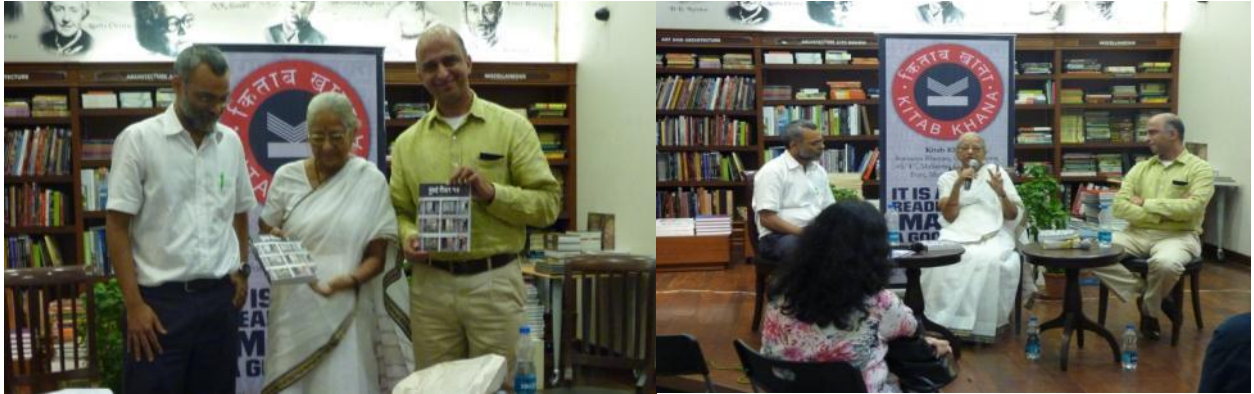
The Champalimaud Centre for the unknown & other Works

The book is on the cancer and brain research centre, the project that was undertaken by the renowned Mumbai based architect Mr Charles Correa. The structure is located on a spectacular site where the Tagus River joins the Atlantic Ocean, and from where Vasco Da Gama and other navigators left for their voyages 500 years ago. The facilities covering a built-up area of 50000 sqm have been disaggregated into 3 buildings, creating between them a generous public plaza that leads diagonally across the site towards the Atlantic Ocean.

The book consists of several photographs and begins with the illustrated images of Champalimaud which is followed by other photographs of Mr Correa's work.

The book was officially launched on 18th October 2013 at the Chhatrapati Shivaji Maharaj Vastu Sangralaya, Mumbai.

The below mentioned are the content of the book:

No:	Chapters
1	The Champalimaud Centre for the unknown
2	Snail Trail
3	Tube House
4	Hindustan Lever Pavilion
5	RamKrishna House
6	Kanchanjunga
7	Gandhi Smarak Sangrahalaya
8	National Craft Museum

No:	Chapters
9	House at Kormangala
10	Cidade de Goa
11	Vidhan Bhavan
12	British council
13	Brain & Cognitive Sciences Centre
14	Two Models Of The Cosmos
15	IUCAA
16	Jawahar Kala Kendra

The graphic design was created by Mr Sudhakar Nadkarni. UDRI have printed 1000 copies through JAK Printers Pvt Ltd.

Quotations were received from the following printers:

No:	Printer	Cost per book with tax	Cost of 1000 books with tax
1	JAK Printers PVT Ltd	Rs 514.73	Rs 5,14,731
2	TM Cards DOT COM	Rs 533. 99	Rs 5,33,988
3	Prise Print Service PVT LTD	Rs 537.93	Rs 5,37,930

Housing & Urbanisation
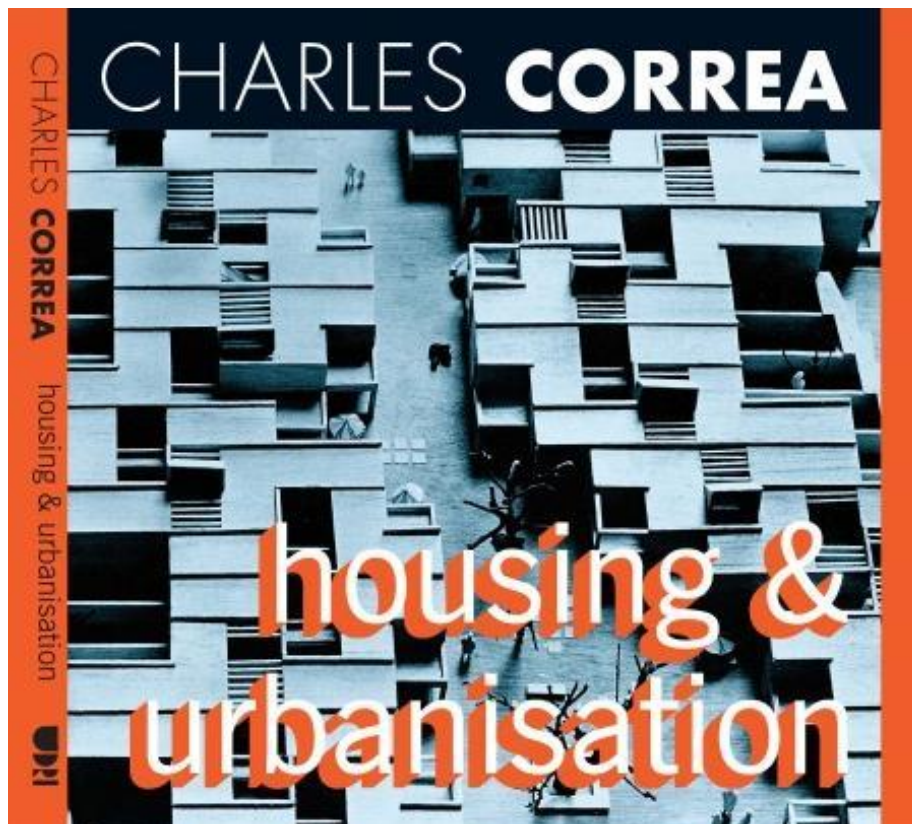
This book documents over forty years of the work of the architect Mr. Charles Correa. It consists of more than 450 photographs, drawings and original sketches.

The first edition was printed in 1999 at Singapore, and the second edition was printed in 2013 in Mumbai.

The first edition was created in the Page Maker, software which is not used at present. All the files which were in the page maker have to be changed to In-Design files. During the process of changing the page maker files to in-design files, colour changes had occurred and there were shift in the edits. UDRI took tremendous amount of time and effort to proof read the book three to four times in order to fix the text in the correct positions. With the help of the JAK Printers Pvt Ltd, the colour changes have been fixed. Since the first edition was printed in Singapore in 1999, there was a difficulty in getting the same quality paper. We had to coordinate with JAK Printers Pvt Ltd for the selection of the papers. There were three samples of the same quality paper and, a sample is selected which is very similar to the one used in first edition.

Content of the book:

HOUSING		RamKrishna House
		Punjab Housing
Tube House		Cablenagar Township

Parekh House	
Correa House	
Tara Housing	
GHB-2	
Thakore House	
Previ Housing	
Rallis Apartments	
DCM Apartments	
Sonmarg	
Boyce	
Kanchanjunga	
Twin Houses	
Hutheesing House	
Sen House	
Patwardhan Houses	
Kapur Farm House	
Squatter Housing	
Belapur Housing	
Titan Township	
Verem Houses	
House at Koramangala	
Malabar Cements	
Low-Income Housing, Malaysia	
Cunningham Crescent	
Cyclone Relief	
Beach Houses	
Bukit Cahaya	

Gobhai House
JNC
HUDCO Housing
ACC Housing
JNIDB
JNC at IISC
IUCAA
CCMB
MHADA

URBANISATION
The Questions
Space as a Resource
A Bill of Rights
Transport and Urban Form
The City as: City
An Urban Manifesto
New Bombay
Ulwe
Nariman Point
New Bagalkot
Hawkers & Pavements Parel
National Commission on Urbanisation

UDRI have printed 1000 copies through JAK Printers Pvt Ltd.

Quotations were received from the following printers:

No:	Printer	Cost per book with tax	Cost of 1000 books with tax
1	JAK Printers PVT Ltd	Rs 372.51	Rs 372508.50
2	TM Cards DOT COM	Rs 404.25	Rs 404250
3	Prise Print Service PVT LTD	Rs 430	Rs 430000

RESEARCH AND RESOURCE CENTRE

Books added to the UDRI Research and Resource Center (RRC)

Although base information and resources are available with the state and private (commercial) groups, citizen groups and non-profit organizations face an uphill task in trying to access this information because of procedural red tape. The UDRI Resource Centre strengthens the public discussion on our city's future by housing an archive on Mumbai. Its efforts have been aimed at providing this alternate space which provides easy access to base information in order to enable participatory urban governance to be realized on the ground.

The RRC collection as of 31st March 2014 is as follows:

Books	1080
Reports	703
Research Reports (by UDRI)	32
Clippings	3254
CD ROMs	643
Photographs	217
Maps	288

The entire catologue can be read in Annexure 4. ???

Publications Stock

The following is the stock situation of UDRI publications as of 31st March 2014

Name	Opening stock 1st April 2013	Reserve	Sales	Complimentary	Ending Stock 31st March 2014
Mumbai Reader 06	274	100	24	4	246
Mumbai Reader 06 (Marathi)	48	0	1	2	45
Mumbai Reader 06 (Hindi)	208	100	0	1	207
Mumbai Reader 07	332	100	24	2	306
Mumbai Reader 08	322	100	23	2	297

Name	Opening stock 1st April 2013	Reserve	Sales	Complimentary	Ending Stock 31st March 2014
Mumbai Reader 09	556	100	27	3	526
Mumbai Reader 10	495	0	33	8	454
Mumbai Reader 12	731	0	2	13	716
Mumbai Reader 13	798	0	150	83	565
Landscape + Urbanism : Around The Bay of Mumbai	230	50	24	0	206
Public Places Bombay	119	100	11	0	108
Churchgate Revival : A Proposal for Urban Management	279	100	12	0	267
Creating A Tourist District : The Gateway of India Precinct : A Proposal For Upgrading and Managing The Area	492	100	18	0	474
Conservation After Legislation	124	100	14	0	110
Heritage Buildings & Precincts Mumbai : A Conservation Manual For Owners & Occupiers	1131	100	28	20	1083
Heritage Environmental : An Indian Diary	213	20	9	1	203
Ballard Estate : A Corporate District	79	79	0	0	79
A Study of The Eastern Waterfront of Mumbai	96	96	1	0	95

Name	Opening stock 1st April 2013	Reserve	Sales	Complimentary	Ending Stock 31st March 2014
Restoring A Banking District	128	100	5	0	123
Extreme Urbanism	36	0	12	0	25
Mapping Mumbai	95	95	0	0	95
Buildings of The Kala Ghoda Art District	47	47	0	0	47
4 From the 50s	41	41	0	2	39
Through The Looking Glass	8	8	0	0	8
Buildings That Shaped Bombay	19	19	0	0	19
Housing & Urbanisation	9	9	0	0	9
Indian Canvas Re-rendered : Documentation of Indo-Sarcenic Architecture	219	0	1	0	218
R-Dharavi	35	0	6	0	29
Architecture in India	4	0	2	0	2
Housing & Urbanisation			154	27	819
The Champalimaud Centre For the Unknown & other works			157	4	739
Mumbai Reader 14			25	95	880

National Streets For Performing Arts

Date: 9th April 2013
Venue: Horniman Circle Garden
Time: 11:00 AM- 4:00 PM

UDRI were approached by Ajit Dayal and Anisha George of National Streets for Performing Arts (NSPA) to assist in identifying public spaces for performing arts in Mumbai. Horniman Circle was identified for lunch time music performances that involved local artists playing music, free of cost for the park visitors. Horniman Circle Trust and NSPA are now working together to bring music programs at Horniman Circle gardens

PLANNING FOR MUMBAI -WORKSHOP 2012

PLANNING FOR MUMBAI

UDRI Development Plan Initiative 2014-34
Joint Studio with **KRVIA**

The Urban Design Research Institute and Kamla Raheja Vidya-nidhi Institute for Architecture cordially invite you to participate at the workshop that we are hosting to bridge the shortcomings in the provisions of the Future Development Plan 2014-34.

The UDRI in an advisory role along with KRVIA conducted a studio regarding the analysis of Amenities and Densities and the corresponding shortfalls for each of these were analysed thoroughly.

The Studio discussed three urban localities and one peri urban locality. The gaps between the existing amenities and the provisioning that needs to take place in the future Development Plan are so phenomenal that no conventional planning/design/management strategy will efficiently bridge them. We believe, due to the unique constraints of Mumbai it is time we think out of the box and have creative/innovative solutions to bridge this demand supply gap. For this workshop we will be focusing on Heath, Education and Environment aspects of Mumbai.

Panel Members:
Charles Correa, UDRI
Cyrus Guzder, UDRI
Dr. Ravi Ramkantan, ex-HoD, KEM Hospital
Neera Adarkar, Architect
Rakesh Kumar, NEERI
Armida Fernandez, SNEHA
Amita Bhide, TISS
Nishit Kumar, CHILDLINE India
Nayana Kathpalia, Citispace

Program:
3.00pm to 3.30pm   Presentation by KRVIA Students
3.30pm to 6.00pm   Round of Comments from the Panel Members
6.00pm to 6.30pm   Comments from other stakeholders

Venue: **Max Mueller Bhavan**
K Dubash Marg, Kala Ghoda
Mumbai, MH 400001

Masters Studio of KRVIA:

Students for the Seminar Course "A Study of Densities and Public Amenities in Mumbai"

Eminent Attendees: Padma Vibhushan Charles Correa, Kamla Raheja Vidyanidhi, Pankaj Jshi, Aniruddh Paul, Rohan Srivastava, David Cardoz, Rohan Shivkumar, Cyrus Guzder

Date: 1st August 2013

Venue: UDRI, V.B. Gandhi Marg, Kala Ghoda

Time: 08:00 AM- 14:00 PM

A Masters Studio was held on the premises of the Urban Design Research Institute on the 1st of August, 2013 for the students of Kamla Raheja Vidyanidhi Institute for Architecture, pursuing their Masters in Architecture. As the final phase of the seminar titled "A Study of Densities and Public Amenities in Mumbai", about 30 students presented their work comprising of drawings, graphs, sheets and models on the various aspects of urban planning in the city of Mumbai and its suburbs, along with a comparative insight with respect to major metropolises like Paris, Shanghai, London and Tokyo.

Condolence Meeting for Mr. Arvind Adarkar

CONDOLENCE

With profound sorrow we inform you of the

sad demise of

Shri. Arvind Adarkar

(Noted Architect, Urban Activist,

Researcher and Educationist)

on 18th August 2013

Friends and Family

have convened a condolence meeting

at the Max Mueller Bhavan, KalaGhoda on

Wednesday, 21st August 2013 at 6.00 p.m.

Sandhya Savant Memorial Lecture:
January 17 2014

Ar. Rahul Mehrotra
Rahul Mehrotra| Projects and collaborations / RMA architects
"Working in Mumbai"
Architects and Designers working in India are now dealing with an entire gamut of transforming social, cultural and economic phenomenon that are moulding the built environment at alarmingly rapid rates. In the process, the role of the professional architect has been marginalized - for within conventional praxis, the professional does not engage with this broader landscape but rather chooses to operate with the specificity of a site or a particular economic group and in the process often becomes disconnected with the context of practice. The lecture will weave a series of narratives around architectural design, observations of the emergent urbanism, the critical engagement with the practice of conservation, research and writing as integral to the practice, interior design and the model of cross subsidies to facilitate social engagement are some of the issues that will be become the focus of these narratives.

Venue:
J.J. College of Architecture
Attendance: 180

Charles Correa Gold Medal: (Competition)

February 15 2014

The Urban Design Research Institute, Mumbai (UDRI) has been awarding the Charles Correa Gold Medal for the best Design Dissertation from the schools of Architecture in Mumbai and Goa since 2001. This year, the UDRI has decided to invite selected schools from Mumbai and outside Mumbai to participate.

Venue:

Sir J. J. College of Architecture

Attendance: 60

Marathi Mumbai Reader 14 Launch

26th February 2014 at 5.30pm

Venue: - Kitab Khana

Speakers: Pushpa Bhave, Samir Somaiya, Anuj Bhagwati

Mumbai Reader is an attempt to provide a glimpse of the complex dynamics of this great and old city of Mumbai. The subjects covered in the 'Mumbai Reader' include those on culture, economy, geography and history of the city. The objective was to enable the reader to form a contemporary understanding of the various issues of this metropolis in the present context. The aim is also to closely archive these changes so that the present and future of the city can be properly reflected upon.

मुंबई रीडर १४

अर्बन डिझाईन रिसर्च इन्स्टिट्यूट
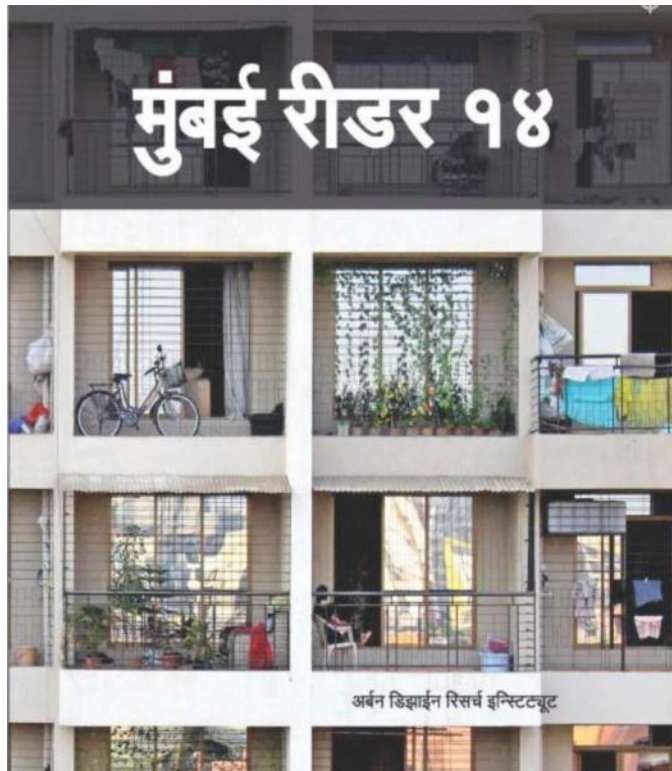
२६ फेब्रुवारी २०१४ रोजी संध्याकाळी ५:३० वाजता किताब खाना येथे आयोजित करण्यात आलेल्या मराठी मुंबई रीडर १४ च्या प्रकाशन समारंभास उपस्थित रहाण्यासाठी यूडीआरआय आणि किताब खाना यांच्यातर्फे आपणास हे हार्दिक निमंत्रण. समारंभानंतर अल्पोपहाराचा कार्यक्रम होईल.

२००६ पासून दर वर्षी यूडीआरआयतर्फे 'मुंबई रीडर' हा लेखसंग्रह प्रकाशित केला जातो; ज्यात मुंबई शहराच्या विविध पैलूंविषयी नामवंत तज्ज्ञांनी व व्यावसायिकांनी लिहिलेले लेख संकलित केलेले असतात. या महान व पुरातन शहराच्या विकासाच्या व्यामिश्र कहाणीची झलक वाचकाला मिळावी, या उद्देशाने हे प्रकाशन होत असते. या दृष्टीने 'मुंबई रीडर'मध्ये संस्कृती, अर्थकारण, भूगोल आणि इतिहास अशा विविध विषयांना स्पर्श केला जातो. अर्थातच आजच्या काळातील विविध प्रश्नांचे चौरस आकलन होण्यास हे लेख सुयोग्य संदर्भ पुरवतात. या संकलनामधून शहराच्या रंगरूपात होत गेलेल्या बदलांची सखोल नोंद घेतली जात असल्याने शहराचे वर्तमान, तसेच भविष्य यांचा वेध घेणारा एक सम्यक दृष्टिकोनही उपलब्ध होतो.

स्थळ- किताब खाना

सोमैया भवन, तळ मजला, ४५/४७ महात्मा गांधी रोड, फोर्ट, मुंबई ४०००००१

Inauguration of the Charles Correa Archives:

Date: 18 October 2013 at 5.15pm

Venue: Coomaraswamy Hall Museum

Speakers:

Charles Correa

Jorge Roza de Oliveira - H.E. The Ambassador of Portugal

Sankalp Meshram

Cyrus Guzder

Attendance: 180
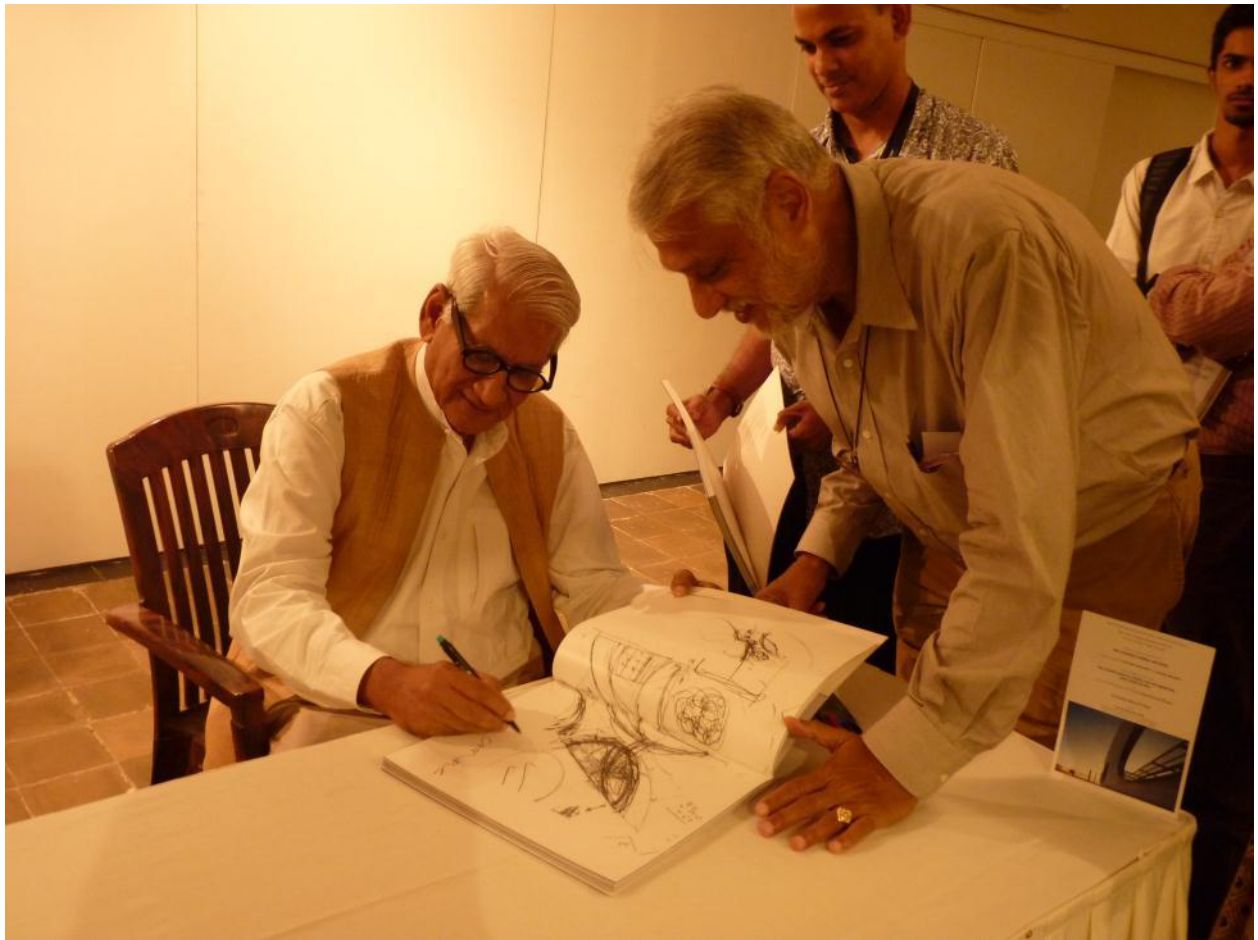
The Chhatrapati Shivaji Maharaj Vastu Sangrahalaya

The Urban Design Research Institute

& The Mohile Parikh Center

Invite you to the inauguration of

THE CHARLES CORREA ARCHIVES

Followed by the film, **Into the Unknown,** by **Sankalp Meshram**

and the release of the book

THE CHAMPALIMAUD CENTRE FOR THE UNKNOWN AND OTHER WORKS

by

H.E. The Ambassador of Portugal **Jorge Roza de Oliveira**

18 October 2013 at 5.15pm

Venue:

Coomaraswamy Hall

Chhatrapati Shivaji Maharaj Vastu Sangrahalaya

Mahatma Gandhi Road, Fort, Mumbai - 400023
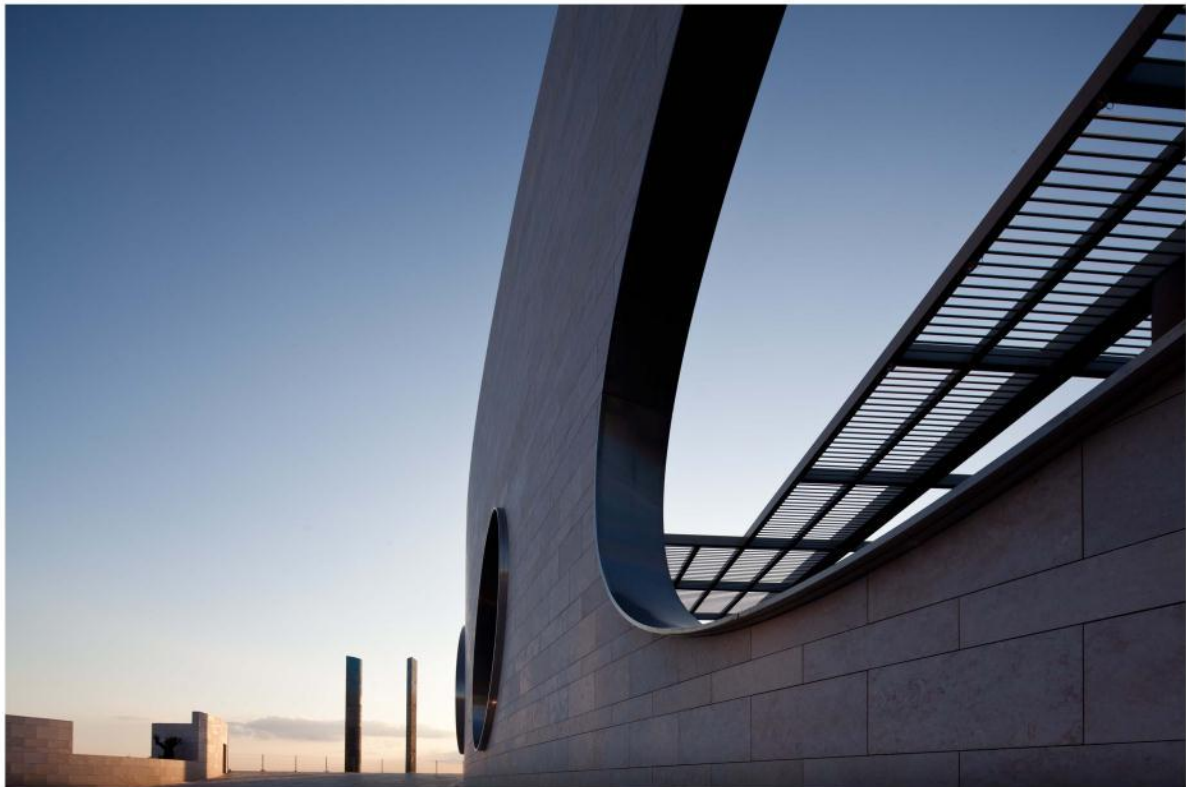
Reinventing Dharavi International Competition

'Reinventing Dharavi: An Ideas Competition' is about generating essentially new ideas, concepts and interventions for integration of urban uses – affordable housing, livelihoods, health and sanitation, recreation, education, urban design and urban planning, social and cultural activities, environment, governance, economics, amongst others in a sustainable manner.

Dharavi is well-established as one of the world's most significant communities requiring a critical re-imagination for a better future. We seek to revisit Dharavi through adaptable and multidisciplinary approaches. Furthermore, the competition aims at exploring strategies for achieving affordability through innovative approaches for governance, management and maintenance.

This competition encourages an exchange of approaches (national and international) as well as novel and creative project ideas to enhance the existing qualities and enhanced future potentials of this site. The competition outcomes are to suggest, and express, an array of strategies considered through a range of time structures – from short term to long term, transitory to permanent or staged development cycles.
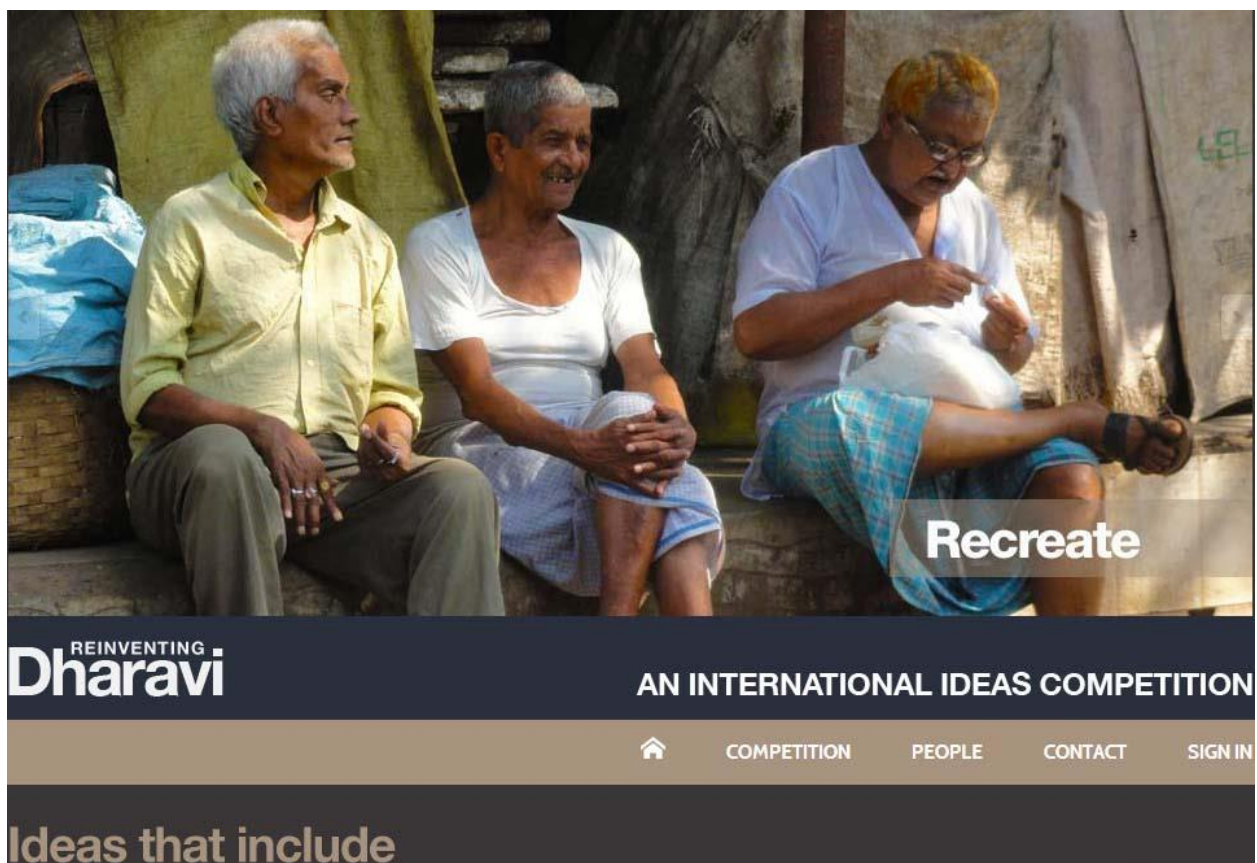
Steering Committee

1. Prof. Akhtar Chauhan

Senior Architect Planner, Educator

Director, Rizvi College of Architecture

Founder President of the International Association for Humane Habitat (IAHH)

2. Mr D T Joseph

Former IAS Officer of the Maharashtra Cadre

Municipal Commissioner of Kolhapur (1978-79)

Secretary Urban Development (1990-96)

First CEO of Slum Rehabilitation Authority

3. Mr David Cardoz

Architect, Lecturer

Chairman, NGO involved in upliftment of marginalised communities

Heritage Conservationist

Member of the Mumbai Heritage Conservation Committee

Member of the Matheran Eco-sensitive zone Monitoring Committee

Jury

1. Mr Abhay Pethe

Economist

Professor, Department of Economics, University of Mumbai

Post-Doctoral Fulbright Scholar

Author

2. Ms Amita Bhide

Social Scientist

Chairperson, School of Habitat Studies, Tata Institute of Social Sciences

Activist for tribal development, rural governance, urban poor

Author

3. Ms Anu Aga

Member of the Board, Thermax Limited

Chairperson of the Thermax Social Initiative Foundation (TSIF)

Author

4. Mr Cyrus Guzder

Entrepreneur

Chairman and Managing Director of AFL Private Ltd

Member of the Mumbai Heritage Conservation Committee

Served as Member, National Commission on Urbanization

Director, Indian Institute of Human Settlements

5. Mr D. M. Sukthankar

Former IAS Officer of the Maharashtra Cadre

Municipal Commissioner of Greater Bombay

Chief Secretary to the Government of Maharashtra

Secretary of the Ministry of Urban Development

6. Mr Jaithirth Rao

>   Entrepreneur
>
>   Founder and Former CEO of MphasiS
>
>   Director of Homefirst Finance Corporation

7. Ms Romila Thapar

>   Historian, Professor
>
>   Author
>
>   Fellow at Lady Margaret Hall, Oxford
>
>   Kluge Prize Winner

Technical Committee

1. Dr. Rakesh Kumar

>   Chief Scientist and Head
>
>   National Environmental Engineering Research Institute, Mumbai Zonal Center
>
>   Visiting Professor, CESE IIT Bombay

2. Mr Shirish B Patel

>   Civil Engineer & Urban Planner
>
>   Founder Director of Housing Development Finance Corporation
>
>   Former Member of the Mumbai Heritage Conservation Committee
>
>   Director of Planning & Works, New Bombay project (1965)

3. Mr Pankaj Joshi

>   Conservation Architect
>
>   Executive Director, Urban Design Research Institute

Supporting Team

Urban Design Research Institute

Following meetigns of the Stearing Committee and Technical Committee have been conducted

Newspaper article on Reinventing Dharavi which appeared in the Friday, March 28th 2014 issue of Hindustan Times (Mumbai Edition).

A contest to revamp Dharavi?

Kunal Purohit

kunal.purohit@hindustantimes.com

MUMBAI: Is there a creative way to ensure that the sprawling slum of Dharavi can be revamped in a way that residents and the rest of the city can gain from it? A new competition seeks to find the answer.

In an inventive way of finding solutions to the teething problems of urban development, a group of experts, urban planners have announced 'Reinventing Dharavi', a contest of ideas and plans for Dharavi. Urban think-tank, Urban Design Research Institute (UDRI) will coordinate the competition, which involves inviting concept plans from experts and planners from across the globe.

"We are trying to arrive at a creative and holistic kind of development, which has so far been reduced to a crude, narrow concept. The kind of development currently practised is also causing great damage and injustice to

HOW IT WILL WORK

The experts will find a way to 'reinvent' Dharavi, which could mean everything from conservation, alteration, replacement, reconstruction and redevelopment

The competition seeks to invite concepts and master plans from consortiums, which will have to include experts from fields such as housing, health/education, environment, law and urban design

local communities," said Amita Bhide, a jury member and the chairperson of the school of habitat studies at the Tata Institute of Social Sciences.

Pankaj Joshi, executive director, UDRI, said the idea was to throw open the debate on the best way out for Dharavi. "Why should only builders and bureaucrats decide what happens to Dharavi? We need to open up the debate and see the kind of scenarios that the

exercise throws up."

Others associated with the initiative believe the competition, carrying a prize of Rs10 lakh for the winning plan, will help push the envelope of ideas for better urban development and design.

The competition has a seven-member jury which will judge the proposals and announce the three winners in a conference to be held in the city in December this year.

Deco Gothic Nomination

The Victorian & Art Deco Ensemble of Mumbai, INDIA

In June 2011 The Government of India via the Government of Maharashtra forwarded the proposal for nomination of "The Victorian & Art Deco Ensemble of Mumbai, INDIA" to UNESCO, Paris to consider it for World Heritage Site status. The submission was prepared by the Urban Design Research Institute for the Government of Maharashtra.

At the heart of the historic centre of Mumbai lies the Fort Heritage Precinct in the middle of which lies the Oval Maidan bounded by monumental 19th C Victorian Neo-Gothic Public buildings to the East and to the West the 20th C Art Deco buildings of Backbay Reclamation and Marine Drive. Together these two architectural genres constitute the most remarkable collection in the world.

Until the 20th C the Victorian buildings fronted the sea. In mid-1935 work commenced the Marine Dive buildings after this land was reclaimed. In the 1930s a row of residential houses in the Art Deco style were built along the western edge of the Oval anchored by the Eros Cinema, representing the contemporary face of the city. This created a cohesive image in terms of style that was added to Mumbai.

Marine Drive as an urban space is a throbbing promenade and a much needed amenity in a densely crowded city. This along with the Art Deco buildings lining it and on the western face of the Oval came to represent the face of Indian modernity.

The Gothic edifices along the Eastern edge of the Oval were created for public institutions integral to the town's development. It is punctuated by the unique beautiful sculpted Rajabai Clock Tower of the University complex, Bombay High Court and behind it the Elphinstone College and the David Sassoon Library etc.

The Western Railway headquarters is a unique blend of Victorian Plan with Islamic Domes and Indian details. One of the grandest monuments is the Indo-Saracenic style of the CSMVS Museum designed by an award winning entry in 1908.

In brief the above comprises the Core Area of the nomination. It is bounded by a buffer area of equally significant buildings such as the CST, Gateway of India, Town Hall & Asiatic Library, Municipal Head office, Crawford Market, Maharashtra Police Headquarters, Majestic Hotel, Various Art Deco Cinema buildings etc.

Both the designated Core & Buffer Areas are now strictly monitored by the Mumbai Heritage Conservation Committee (MHCC) and have largely retained their historic integrity and the same scale and texture. This is the only nomination for India that covers the 19th C and early 20th C genres which is a highly under represented period on the UNESCO World Heritage Site internationally.

For all these attributes this ensemble is worth of the status of a World Heritage Site status.

मुख्य मंत्री
महाराष्ट्र

सत्यमेव जयते

Chief Minister
Maharashtra

Preface

As the Chief Minister of Maharashtra, among the leading and progressive states of India, I am delighted to present the nomination dossier of the Victorian & Art Deco Ensemble of Mumbai for inclusion in UNESCO's List of World Heritage Sites.

Mumbai, envisioned as *Urbs Prima* in Indis, remains the financial capital of India and represents one of the most remarkable urban ensembles, that of the eclectic collection of 19th Century Victorian Gothic buildings positioned among the largest 20th century ensembles of Art Deco structures. What is strikingly unique about this urban ensemble is that both the styles of architecture spanning over a century stand facing each othe across the Oval Maidan, making it a truly unique urban ensemble in the world.

Especially given that UNESCO recognizes the need for greater representation and inclusion of 19th and 20th Century heritage in its initiative for a greater representation across its sites, I am confident that Mumbai's Victorian & Art Deco ensemble would contribute positively to the larger spectrum of World Heritage Sites in the world.

I would like to extend my heartfelt thanks to various citizens groups who have worked in partnership to create this Dossier. On behalf of the Government of Maharashtra, I endorse this Nomination and hope that it will be included in the UNESCO List of World Heritage Sites.

मुख्य मंत्री
महाराष्ट्र

सत्यमेव जयते

Chief Minister
Maharashtra

August 29, 2013

Dear Chandresh ji,

I am writing to seek your support to Nominate Mumbai's Victorian & Art Deco Ensemble to UNESCO as a World Heritage Site.

Mumbai, envisioned as *Urbs Prima* in Indis, remains the financial capital of India and represents one of the most remarkable urban ensembles, that of the collection of 19th century Victorian Gothic buildings positioned facing among the largest 20th century group of Art Deco structures.
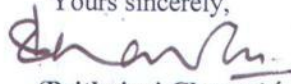
What is strikingly unique about this urban ensemble is that these two architectural styles straddling the 19th and 20th centuries valiantly face each other, engaging in a unique architectural dialogue that is singular to Mumbai and unparalleled in the world. This, along with the fact that 19th and 20th century heritage is highly under represented on the UNESCO list, makes it a worthy candidate for selection on the UNESCO World Heritage List, under criterion (ii) and (iv).

Remarkably, this urban ensemble, embodying international modernities of the 19th and 20th centuries respectively, is intact today. It has survived at the very heart of Mumbai's commercial and financial centre because the city enacted India's first heritage regulations in 1995, establishing itself as the pioneer in urban conservation in India. The Victorian and Art Deco buildings maintain a high degree of integrity, continuing their authentic use as vital assets to the city-public buildings, cinemas and housing for the citizens of this metropolis.

I enclose the Nomination Dossier for Mumbai's Victorian & Art Deco Ensemble to UNESCO as a World Heritage Site and request you to kindly forward it to UNESCO Paris as India's nomination for the coming Nomination Cycle of 2014.

With warm regards,

Yours sincerely,

(Prithviraj Chavan)

Smt. Chandresh Kumari Katoch,
Hon'ble Minister for Culture,
Government of India,
C - Wing, Shastri Bhawan,
New Delhi 110001.

Charles Correa Archives

The Charles Correa Archives consist of over 6000 sketch designs and drawings, along with photographs, essays and media reports, covering more than fifty years of architectural and planning work. This material, which was the heart of the exhibition that the RIBA mounted in London this summer, has been digitized and made accessible through a specially developed computer program that interlinks all the data - so that the visitor, starting with just the name (or the image) of a project can proceed to review all the drawings, photographs, and other material in an easy user-friendly process.

Since October 21st 2013 the Archives are available for use by students and scholars, at the offices of the UDRI, located at Kala Ghoda.

My Dream Colaba Project; Tracing Public Spaces

Project - Tracing Public Spaces

The project, Tracing Public Spaces, aims primarily to promote pedestrianisation, reclaim public spaces and enhance liveability. UDRI aspires to help the citizens and communities of Colaba to revitalise the precinct and encourage pedestrian movements. Coming together with the local group My Dream Colaba (MDC), an envisioning exercise was undertaken to develop a local area plan for ward 227, on the lines of Fort Management Plan.

Introduction

As a metropolitan, with a dense concrete cover, Mumbai experiences dearth of quality open spaces. Unfortunately public spaces in the city have reduced considerably over the years. A comparative analysis of similar metro cities in the world, states that open space reserved per person in Mumbai is relatively low (less than 2 sq. m.) This implies that there is a need of more interactive public spaces in the city. Loss of these public spaces would in turn be a loss to the city.

Colaba has a unique character to itself owing to heritage structures, tourist places and harbours/ports. Given the social hierarchy in Colaba and activities ranging from art galleries to businesses and residences, the planning principles should address to the needs of all the communities and user groups. Every individual is entitled to benefit from the facilities which in turn will help in further development of the society.

Scope of project:
- Pedestrian friendly environment
- Street infrastructure up gradation
- Barrier free design of pedestrian facilities
- Interactive public spaces

Key Project Objectives
- Demarcate the Study area
  The study area needs to be identified in order to give design proposals. Demarcating the extents of the site under consideration will ease further documentation such as mapping and surveying. Provide sustainable solutions for street design which is **'accessible to all'**
  Streets to be looked at as community assets and they should reflect balanced needs of community and transportation networks. The objective is to make the streets pleasant, vital and interesting to be in, using creative and innovative place-making, simultaneously providing physical connection and socio-economic interaction to the communities.
- Reclaiming Public spaces
  Public spaces, in the overall process of planning and designing, are not handled with the same sensitivity and generosity as other land uses. These spaces then tend to deteriorate and are misused over time. Historic districts, small alleys, informal public squares can be treated and designed to make them more inviting for people.

- Identify the Stakeholders

  Stakeholders for this project need to be identified for conducting outreach programmes and involving public groups in the design process. Since this is a citizen-driven proposal, the process will need to have a go ahead from all the user groups of the area.

Project tasks/activities

Data collection

Data collection is essential to understand the context. This would be through **mapping** of certain factors like the facilities for pedestrians, vehicular movements etc. **Surveys** would be helpful to understand the walking environment and would also cater to the expectations of the users.

Analysis and Proposals

Analysis of the data collected through maps and surveys will be crucial as it would then translate on to the design principles and proposals for that area.

Outreach programmes/ Stakeholder participation

UDRI will engage local communities, citizen groups and NGO's in the study area for visioning of the project. This will mainly include organising various stakeholder workshops and awareness programmes during the course of the project. During the initial phase, UDRI will engage with local communities to collect data through surveys, understand local context and get feedback on the concept plan.

Execution and monitoring (execution framework)

UDRI will act as a technical advisory for developing the project and supervise its execution.

Outreach Programme

Tracing Public Spaces

Urban Design Research Institute **l** MyDreamColaba **l** MIT

UDRI collaboratively conducted a week-long workshop for school children with MyDreamColaba group and Ana C Vargas, a student of Architecture and Urbanism of MIT, Boston. This was the first step of a larger process to develop a comprehensive plan for ward 227 with key inputs from My Dream Colaba and UDRI.

The workshop aimed to create a map of Colaba that shows its available public spaces and those neglected and hidden ones that are opportunities to generate new public spaces for the community.

A methodology was designed by Ana C Vargas which gave children from the local community the opportunity to photograph and map the places they like and the ones that they felt could be improved. Then as a team, collecting their individual pictures and maps, a new map has been developed which shows how such spaces can be connected to create a walking trail within the area.

Photo credit: Ana C Vargas, Student of Architecture and Urbanism of MIT, Boston

A collaborative exhibition between Urban Design Research Institute (UDRI), My Dream Colaba, Massachusetts Institute of Technology (MIT) and local schools namely Fort Convent, Campion School and Dunnes Institute, held on 4th and 5th of August,2013.

Colaba locals map out plan to reclaim lost open spaces

Linah Baliga | TNN

Mumbai: Reclaiming unused public spaces and opening up new avenues will be a major thrust this year for Colaba residents and their elected representatives. The locals, along with corporator Makarand Narwekar, are working towards creating a model 227 ward by expanding public spaces and making their areas disabled friendly.

A blueprint for the campaign is being prepared in collaboration with Urban Design Research Institute (UDRI) and Massachusetts Institute of Technology (MIT), wherein local schools, namely Fort Convent, Campion School and Dunnes Institute have also been roped in.

Sassoon Dock and other small informal areas can be potential beneficiaries of planning in Colaba, say experts. Some areas such as the little alleys linking two or more major roads can be developed as more inviting spaces, an example of which is DSK lane which lies between Cuffe Parade and Wodehouse Road.

"After 50 years, we got the lane opened up by the civic body recently. It was earlier used as a junkyard but is now used by fisher-folk to go to Sassoon Dock; it is also used by school-children. We aim to make it pedestrian friendly and create a an eco-friendly space for senior citizens to use as well, for morning walks," said Siddarth Pandit, director, projects, UDRI.

"Footpath surfaces will be made uniform with ramps for wheel-chairs," said architect Ana Vargas, MIT, Boston.

Narwekar plans to utilize Rs 1 crore, corporator's discretionary funds for this project.

The BMC has already sanctioned Rs 50 lakh and has tied up with Able Disable All People Together (ADAPT) to make ward 227 disabled-friendly.

Photo credit: Ana C Vargas, Student of Architecture and Urbanism of MIT, Boston

Fort Management Plan

The Fort Management Plan Recommendations and report have been completed. These are now in the process of being presented to stakeholders and other authorities for implementation.

Implementing the FMP

Transportation Think Tank.

Ballard Estate Courtyards

Permissions are required from the Mumbai Port Trust (MbPT) before any work in the Ballard Estate courtyards can be initiated. Mr Shirish Patel and Mr D T Joseph were approached to meet with the Chairman Port Trust in order to obtain these permissions and they had agreed to do so. UDRI has provided them with relevant material to make their case to the Chairman. We are still awaiting a response on this matter from Mr Shirish Patel and Mr D T Joseph.

The UDRI has also spoken to Mr. Bimal Mehta of Vakils as well as Mr. Y D Khatau of Varun Shipping regarding support for the implementation of the Ballard Estate project and to look at involving the Ballard Estate stakeholders in this process through the Ballard Estate Welfare Trust (BEWA).
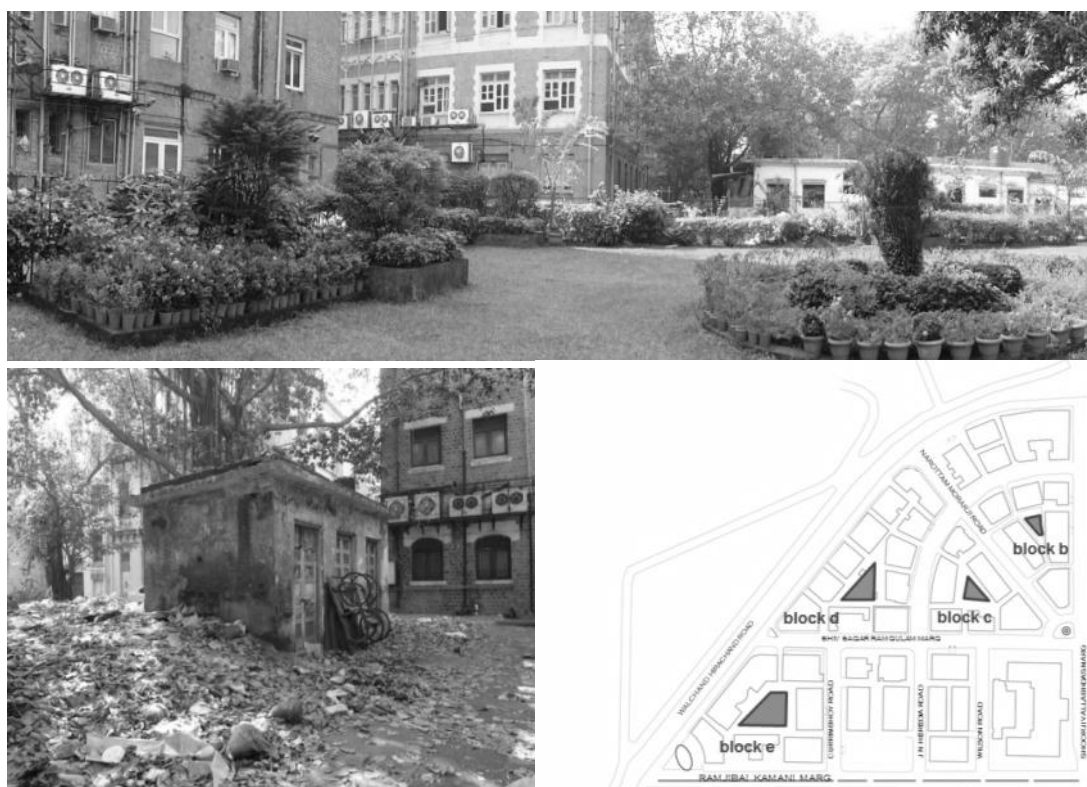
Meetings taken place for the Ballard Estate Courtyards

Meeting with Brinda Somaya at Somaya and Kalappa Consultants' office   1st August 2013

Attendees:

Brinda Somaya	Principal Architect, Somaya and Kalappa Consultants
Cyrus Guzder	Trustee, UDRI
Pankaj Joshi	Executive Director, UDRI
Mayura Gadkari	Research Associate, UDRI

Agenda: Ballard Estate Courtyard Revitalisation

MG Road Engineering Design

For Ballard Estate Courtyard Revitalisation project:
1. Mr. Pankaj Joshi presented the idea of revitalising the courtyards of Ballard Estate to Brinda Somaya, offering whether she would be willing to take up the project, upon which Ms. Somaya agreed for the same.
2. Mr. Cyrus Guzder and Ms. Brinda Somaya mentioned that some drawings of the area had already been done by consultants ANA (Anuprita and Aparna Surve) for Ballard Estate Welfare Association (BEWA). UDRI to check with the resource center and Mr. Guzder for the availability of any such information.
3. It was agreed that a list of stakeholders should be built up and contacted. Ms. Brinda Somaya and Ms. Cyrus Guzder suggested some names for the same which are attached herewith.
4. UDRI to send out a letter for forming of a stakeholder group for taking off of the project.
5. It was also decided that an NOC would be required from Bombay Port Trust and MCGM for any such work to happen. A meeting to be fixed with the Bombay Port Trust Chairman for taking his consent for this kind of initiative.
6. First meeting for the stakeholder group planned on 10th of September 2013, probably at the Somaya and Kalappa office. UDRI to prepare a small presentation for the introduction of the initiative to the stakeholders.

For MG Road Engineering Design:
1. The brief and scope of work for the project was explained by Mr. Pankaj Joshi to Brinda Somaya and offered her to take up the work for the same.
2. It was suggested by Ms. Somaya that the job would be done best by a landscape architect and therefore suggested UDRI to provide her a small drawing of the area with the necessary elements for detailing to be marked, and she would get in touch with some of the landscape architects to carry out the work.
3. It was also mentioned that some drawings and street design guidelines were also submitted to MCGM in the past by various(8) consultants for places like Carmichael road, etc. Somaya and Kalappa to check the availability of the information with their office, if yes, share the same with UDRI for further work.

The meeting ended with a vote of thanks.

Stakeholders for Ballard Estate:

BPT Chairman
Somaya and Kalappa Consultants
Neera Sagi,
Ashok Wadhwa,
Arun Mehta,
JaiSagar
Krishna Kotak
N. S. Guzder
Reliance
Hindustan Constructions
Laxmi Building
Voltas House
Grand Hotel

Bank of Baroda
Scindia House
Daulat Petrol Pump
Darabshaw House
Wakefield House
Hamilton House
Singhania, Raymond
DBC, Dubash House
Kaiser-I-Hind House
Kamal Malik Architects
Contractor Building
Harish Jagtiani,
Sevantibhai Parekh

11th September 2013

Meeting for Ballard Estate Courtyard Revitalisation project at Somaya and Kalappa Consultants' office

Attendees:
Mr D M Sukthankar
Mr Cyrus Guzder
Mr Bimal Mehta
Ms Brinda Somaya
Ms Neera Adarkar
Ms Nayana Kathpalia
Pankaj Joshi
Omkar Gupta
Siddharth Pandit
Mayura Gadkari
Representatives from Mr Sevanti Parekh's office
Representative from Somaya and Kalappa Consultants

Agenda: Ballard Estate Courtyard Revitalisation

- The executive director of UDRI, Mr Pankaj Joshi presented the idea of revitalising the courtyards of Ballard Estate to all the members in the meeting.
- **Role of the stakeholders:** This was discussed extensively, upon which it was agreed that Mumbai Port Trust (MbPT) plays an important role to acquire a No Objection Certificate (NOC) for the project to take off. MCGM will play the role of upgrading the infrastructure in the area in the form of sidewalks and common areas. Somaya and Kalappa consultants will be the consultants for the project, overlooking the project work done. It was decided that it is necessary to revive the already existing association in Ballard Estate, the Ballard Estate Welfare Association (BEWA) to play the role of a client for this initiative and UDRI will contribute to the project as an advisor.
- Pankaj Joshi also suggested that once the MbPT agrees on the project, other players such as MCGM, BEST and MMR-HCS/MMR-EIS of MMRDA can come into picture to take it forward.
- Mr Bimal Mehta from Vakil and Sons agreed to get in touch with other possible members of BEWA (Mr Rawal from Vakil's and Mr J D Mehta from Binani), to get a clear picture of the association's interest in a project like this and the possible resources that it can provide. He also mentioned the association having certain funds which were to be used for the benefit and improvement of the area. Ms Nayana Kathpalia also volunteered to speak to some of the former members of BEWA regarding the same.
- It was suggested that BEWA should be revived and to carry out the further processes, a chartered accountant and a lawyer to be consulted to prepare the reports and resolutions. Also, it should invite more members to be a part of the same and get their agreement on the project.
- Everyone had a consensus on the decision that a brief proposal needs to be prepared on behalf of BEWA which can be submitted to MbPT, MCGM and BEST to get their agreement.
- Mr Sukthankar suggested that once the proposal is ready, the group could approach people like Mr Afzalpurkar and Mr Rahul Asthana (former chairmen of MbPT) to help get the project more credibility.
- It was decided that the group will re-convene on the 25th of September 2013 to follow up on the processes.

The meeting ended with a vote of thanks.

25th September 2013

Meeting for Ballard Estate Courtyard Revitalisation project at Somaya and Kalappa Consultants' office

Attendees:
Mr Cyrus Guzder
Mr Bimal Mehta
Ms Brinda Somaya
Ms Sudha Arora
Mr Prasad Shetty
Ms Shirin Bharucha
Ms Nayana Kathpalia
Mr Pankaj Joshi
Mr Omkar Gupta
Mr Siddharth Pandit
Ms Mayura Gadkari

Agenda: Ballard Estate Courtyard Revitalisation

- Mr Bimal Mehta from Vakil's briefed everyone about the present condition of Ballard Estate Welfare Association (BEWA). He mentioned that Mr J D Mehta from Binani Cement and a former member of BEWA has expressed his interest in reviving the association and using the availbale funds with them (approx. Rs. 25 lakh) for the benefit of the area of Ballard Estate.
- Mr Cyrus Guzder suggested that the association be reconstituted with appointment of new secretary and other members. It was also suggested that a meeting be set up with Mr J D Mehta, Mr. S.M Pathania (the current Chairman) and Ms Jitiksha Shah (the current Hon. Secretary) for further discussions and processes regarding the same. Everyone had a consensus on meeting with BEWA in the third week of October for further talks.
- It was decided that there could be two work groups, one involving all the current and former members of BEWA and the other involving Somaya and Kalappa Consultants and UDRI. SnK and UDRI also to co-ordinate with A&A Consultants (Aparna and Anuprita Surve) for the drawings and other work done for BEWA previously. Executive Director, UDRI suggested that MMR-HCS can partner in terms of funds.
- Brinda Somaya suggested that she would get in touch with Ms Neera Saggi (BBCI and L&T) for getting her consent for the project as she plays an important role as a stakeholder. UDRI to eventually meet Ms Saggi to brief her about the project and bring her up to speed with the current proceedings.
- Nayana Kathpalia mentioned that she was in the process of setting up a meeting with Mr Milind Deora, Hon'ble Minister of State for Shipping and Communications & IT, Government of India, regarding the project.
- It was decided that UDRI would put together a presentation for the upcoming meeting with MbPT to get a NOC from them for the project to take off. Executive Director, UDRI mentioned that the group shall be accompanied by Mr D M Sukthankar and Mr Jamsheed Kanga for the meeting with MbPT commissioner.
- The group also had a conference call with Ms Aparna Surve of A&A Consultants regarding the previous work done by them for BEWA. Ms Aparna mentioned that A&A had done mapping of the entire area of Ballard Estate and given proposals for street furniture, landscape design for the area in the form of 3D views. The entire project was of about 6-8 months duration.

It was agreed that Somaya and Kalappa Consultants would follow up with A&A regarding the required data.

- Further plan of action:
    - Reconstitute BEWA with the assistance of the current and former members.
    - Co-ordinate with A&A Consultants for the previous work done for BEWA.
    - Prepare a presentation for the meet with MbPT

The meeting ended with a vote of thanks.

Pedestrianisation of Streets

4 major internal streets were proposed for complete pedestrianisation by the UDRI. They are, Nagindas Master Road, Perin Neriman Road, Bora Bazaar Road, Rustom Sidhwa Marg.

Off these it was suggested that, Perin Nariman Street and Rustom Sidhwa Marg can be considered for pedestrianisation as a pilot.

Information and Communication Infrastructure

UDRI's MumbaiDP24seven initiative is designed to integrate the needs of the citizens in an inclusive and bottom up approach and advocate for these needs to be included in Mumbai's Development Plan.

As a part of this initiative, 11 planning areas were identified and emphasized by key stakeholders. The stakeholders ranging from citizens, community based organizations, local ward representatives, NGOs, planning experts have identified water, housing, sanitation, education etc. as the emphasis areas that needed to be integrated into the Development Plan.

 A key area that was identified but hadn't evolved yet, in the 20 year vision for Mumbai, was of Information and Communications Infrastructure for which UDRI sought a grant from Ford Foundation. The grant requested was $200,000 for a two year period. UDRI intended this grant for research and documentation, capacity building and advocacy tasks under the Information and Communications Infrastructure (ICI) project for its MumbaiDP24seven initiative.

Ford Foundation accepted UDRI's proposal. The project was initiated for a 2 year period 2013-2015. The grant will fund the development of ICI vision for Mumbai and the development of a GIS platform.

Project Objectives

UDRI's key objectives in the Information and Communications Infrastructure project are to adopt public participatory mechanisms in developing the 'Digital Vision' as a major input into the Development Plan preparation process. UDRI strategically aims to achieve the following objectives

- Incorporate into the Development Plan, a Digital Vision for the City of Mumbai that focuses on Universal Access to Information and Communications Infrastructure especially in the urban communities.
- Develop with input from all stakeholders, guidelines in the areas of infrastructure planning, for Internet and Broadcast network communication, to realize this Digital Vision.
- Develop a web enabled GIS application to illustrate the use of digital technology for empowerment of slum communities. The precise requirements and type of application will be explored in the consultative process.

Given these objectives, UDRI proposes, a multi-pronged approach focusing on
- Research and Documentation
- Capacity Building
- Dissemination

The specific subtasks were held through a consultative process. The list of meetings with the attendees is shown below

Date and Venue	Subject of Meeting	Attendees	Important Outcomes
4th June 2013, UDRI	Media Survey and broadband planning	IIT Mumbai, UDRI, PUKAR, MAJLIS, PRAJA, Childline India	1st Draft of planning principles formulated. Understanding of media access in slums in Mumbai
18th June 2013, UDRI	Public Consultation Meeting	UDRI, IIT Mumbai, Indian Red Cross, BEAG, Hindustan Times, BUILD, MAJLIS, CRIT, KRVIA, G5A Foundation	Public comments on planning principles sought. Public information and advocacy launched
13th July 2013, UDRI	GIS Database for Mumbai	BIOND, PRAJA, Shirish Patel Associates, Aditya Birla Management, UDRI	GIS data needs for urban planning and problem reporting in Mumbai
19th July 2013	Planning principles for Broadband finalized and sent to CM-Maharastra, MC-MCGM and Chief Engineer- DP		
25th July 2013	Planning principles for Broadband finalized and sent to Mayor-Mumbai		
3rd September 2013, UDRI	Stakeholder roles discussion	IIT Mumbai, UDRI, Ford Foundation, MAJLIS, PUKAR, Journalism.org.in, NIXI, Telxess Consulting	Tasks for research, advocacy, survey and public campaign finalized
25th October 2013, IIT	Tasks Review	IIT Mumbai, UDRI, PUKAR, MAJLIS, Telxess Consulting	Draft Surveys for internet penetration and slum areas identified
27th December 2013, PUKAR	Tasks Review	IIT Mumbai, UDRI, Ford Foundation, PUKAR, MAJLIS, Telxess Consulting	Draft Survey circulated and finalized, areas for survey finalized.
5th February 2014	DP workshop for ICI	IIT Mumbai, UDRI, PUKAR, MAJLIS and over 50 other attendees	ICI acknowledged as key investment for Mumbai in the DP.

4th June 2013

Meeting Minutes and Action Items List

Attendees:

Cyrus Guzder, Anuj Bhagwati (Trustee UDRI)

Pankaj Joshi (Executive Director UDRI)

Siddharth Pandit, Omkar Gupta (UDRI)

Prof. Abhay Karandikar, Head of Electrical Engineering, (IIT Bombay)

Anita Patil Deshmukh (PUKAR)

Milind Mhaske, Kaustubh Gharat (PRAJA)

Nishit Kumar (ChildLine India)

Shikha Pandey (Majlis)

Vaibhav Saboo, Rohan Pillai, Sravya Chebrolu (IIT Bombay)

Minutes:

- The meeting was organized to discuss and finalize the planning principles to guide the inclusion of broadband infrastructure in revision of the Mumbai Development Plan (2014-34).

- Anita Patil Deshmukh from Pukar presented the key findings from the survey conducted by PUKAR across Mumbai to gauge access to digital media. The findings corroborated the need for need of wider broadband access across the city. Some key findings from PUKAR survey are
  - 25% of people surveyed did not have internet access
  - Of the people that do, majority of them access it through mobile devices.
  - 81% of the internet users are between ages of 15-30.
  - 70% of the people have mobile phones.

- The planning principles were discussed. These are
  - All households, especially the slum and lower income households should be connected to broadband infrastructure within 5 years. The city will integrate universal access (all persons are covered) and inclusiveness (access irrespective of socioeconomic variation) in its planning for broadband infrastructure.

  - All municipal facilities such as municipal schools, municipal libraries, municipal medical facilities, fire stations, police stations, municipal parks, sewage treatment plants, pumping stations, transportation facilities etc. should be connected 24*7 to broadband infrastructure. There should be sufficient redundancy built into the infrastructure to keep these facilities connected for disaster management and emergency response and rescue.

  - The Municipal Corporation should be the planning and monitoring agency responsible for deploying the broadband infrastructure. Firstly, it should be the owner of municipal broadband network that will connect to municipal facilities and break the digital divide that exists in low income and slum households. Secondly, it should develop standard practices to follow for digging up of the roads and solving right-of-way issues if any, before broadband infrastructure gets installed by private telecom companies. Finally, it

should offer all citizen services and municipal content on the web for delivering efficiency and accountability to the citizens. There should be specific targets for penetration of broadband infrastructure every 5 years in terms of users and/or geographical wards in the city.

o The private sector may be engaged in laying down the infrastructure over the last mile, deploying the programs and content to harness the infrastructure.

o The infrastructure should be scalable and technology neutral. As the content becomes increasingly digital (video based) and as the cost of devices continue to drop, the number of users seeking broadband will continue to increase. The number of dark fibres should be sufficient to accommodate these users 20 years hence.

- The stakeholders agreed that broadband infrastructure was the need of the moment and will help facilitate delivery of services, reduce corruption and improve the accountability of the city administration. Examples of Singapore, Finland, the Indian Railways and even Mira Bhayandar point to the successes of adopting e–way of doing things.

- There should be some space and role for community internet, similar to community radio or television to improve understanding the interpretation of knowledge in a communal manner.

- Universal access should be a citizen's right. This does not directly translate to unlimited broadband access with connections to every household but a combination of private, municipal and public access to broadband infrastructure should be present.

- The MCGM should be encouraged to apply to the Universal Service Obligation Fund (of about Rs 40,000 crore) to build this infrastructure in Mumbai and especially to low income and slum areas.

- MCGM should move all its citizen services online to reduce wastage and corruption.

- The meeting concluded with Executive Director, UDRI requesting the stakeholders to get together on 18th June 2013, to sign the planning principles document as well as to invite other larger stakeholders to do the same.

Meeti...

- ...m
the Urban Design Research Institute, with inputs from its DP stakeholders, has identified Information and Communications Infrastructure as a critical focus area for the city. The

stakeholders have devised a set of principles focusing on need for broadband infrastructure in Mumbai, especially for slums and low income households. With the Government increasingly putting its services on the Net, the UDRI believes access to broadband infrastructure must be regarded as a **Citizen's Right**.

- Universal Access to Broadband infrastructure is important because it spells:
    - Access to **knowledge**, especially for urban slums and low income households.
    - Access to **essential services** such as e-education and e-health leading to better quality of life.
    - **Higher productivity** leading to economic development
    - **Co-ordination and critical response** in times of disaster management, accidents, etc.
    - **Efficiency** in government functioning through sharing and integration of resources, data, etc.
    - **Increased public participation** due to e-governance and open public data.

- To this end, the UDRI has devised a set of planning principles which were discussed in a meeting with various city stakeholders. Those present included experts like Professor Abhay Karandikar (IIT Mumbai), Madhushree Datta (Majlis), Anita Patil Deshmukh (PUKAR), Hema Ramani (BEAG) and urban planner Prasad Shetty (MMRDA Heritage Committee).

- At the end of the meeting, it was agreed that these principles would be put forward to the MCGM to be included in the DP. Some of the highlights are:

    - **All households, especially slum & low income, should be connected to broadband infrastructure within 5 years**

    - **All municipal facilities connected 24x7 too. These facilities should be integrated for disaster management and emergency response.**

    - **MCGM should be the planning and monitoring agency responsible for deploying broadband infrastructure. It should offer citizens services and municipal content on the web.**

    - **The infrastructure should be scalable and technology neutral.**

    - **MCGM should move ALL its citizen services, like health, transport, education, etc, online to improve efficiency of service delivery.**

- These planning principles will be signed by all stakeholders and sent to the MCGM in a few days

18th July 2013

Meeting Minutes and Action Items List

Attendees:

Cyrus Guzder (Trustee UDRI)
Pankaj Joshi (Executive Director UDRI)
Siddharth Pandit, Omkar Gupta (UDRI)
Dr. Ajit Ranade (9:30 am)
Prof. Abhay Karandikar, Head of Electrical Engineering (IIT Bombay) - 12:30 pm

Minutes:

- The meeting was organized to revisit and discuss the strategy for advocating for municipal broadband in view of the impending 4G launch. The CM's office has evinced interest in making Mumbai the first smart city in Mumbai but is sceptical if the 4G technology will pre-empt any municipal wireless plan.

- The consensus was that deployment of municipal wireless was a complicated situation primarily due to lack of revenue model   to fund the huge capital costs for building the infrastructure. So though the marginal costs would be low to attract every additional user, there has to be sufficient minimum number of users to justify the building of this fibre network.

- With the reported number of 4G towers to be deployed all over Mumbai, totalling anywhere between 10,000 and 40,000, it is imperative that that the laying down of ducts for backhaul network (primarily a fibre optic network) be done by MCGM. The private telecom agencies can deploy their own fibres but the ducts will be installed by MCGM.

- In summary, the 4G and municipal wireless network will complement each other without any fears of loss of revenue. The MCGM will continue to earn revenue as it is currently for leasing out ducts, right of way etc.

- A piecemeal approach was advocated to demonstrate success to MCGM and state government. DSL technology over existing copper lines can be used to enable wifi access at PCO booths. Other suggested sights were bus depots, municipal parks, libraries etc.

- USO fund can only be tapped for access to underserved areas where private telecom agencies might not find it economical to expand their fibre optic network.

- The meeting concluded with Mr. Guzder and Pankaj Joshi requesting the presence of Dr. Ranade and Dr. Karandikar for possible meetings with the Principal Secretary to CM and CM's office.

3rd September 2013

Meeting with Ford Foundation

Attendees:
Ravina Aggarwal (Ford Foundation)
Prof. Abhay Karandikar (Head of Electrical Engineering, IIT Bombay)
Cyrus Guzder (Trustee, UDRI)
Anita Patil-Deshmukh (PUKAR)
Amitabh Singhal (Telxess Consulting)
Mr. Aloke Thakore (Foundation for Excellence in Journalism)
Shikha Pandey, Paroma Sadhana (Majlis)
Pankaj Joshi (Executive Director, UDRI)
Siddharth Pandit, Omkar Gupta, Sarath Babu, Mayura Gadkari (UDRI)

Minutes:

- The Mumbai consortium meeting was organized to discuss and finalize the guidelines regarding the broadband infrastructure and its inclusion in the Mumbai Development Plan (2014-34).

- The agenda of the meeting was:
    - The relevance of the inclusion of all sections of people in the planning process. The need of the Development plan 2034 to envisage the services required for the people of the city for the next 20 years.
    - Universal access to people as a serious concern, considering that most of the services and information provided by public offices are through internet and more than 70% of the population don't have access to it.
    - Creating awareness among people regarding the need of universal access to all. Campaigns for making people aware of the fact that provision of universal access to the information can lead the inclusive planning process in a better way.
- The major outcomes of the meeting were:
    - The MCGM will have to plan accordingly to preserve the urban form and visual quality of the city which will not be altered by the provisions of broadband infrastructure. Thus corporation have to make plan for the special network architecture which is scalable and accessible and also coexist with all the service providers' network architecture.
    - The public institutions of MCGM such as municipal schools, municipal libraries, municipal medical facilities, fire stations, police stations, transportation facilities etc. should be connected 24*7 to broadband infrastructure. Through the provisions of internet at public institutions, people of all sections can be brought under the umbrella of universal access.
    - Pilot demonstration project is required to create awareness regarding the benefit of universal access to the people. As a part of that, one area with all sections of people from the city to be selected to demonstrate the project.

- UDRI shared the key outcomes of its governance and advocacy efforts to include ICI infrastructure as a part of the Mumbai Development Plan 2014-34.
- UDRI suggested giving open access to the Kalaghoda area during Kalaghoda festival as a pilot project.
- Everyone had a consensus over the fact that a city level task force for broadband infrastructure is required to prepare guidelines and speed up the process.
- It was suggested that cities such as Hong Kong, Kuala Lumpur and city from Vietnam be considered as part of case study before pilot project.
- Special mail group and project management cloud to be created to improve the coordination and communication among the stakeholders of the consortium.
- Stakeholders agreed to meet quarterly to ensure and monitor the progress of different activities.
- Consortium also discussed about the financial plan of broadband infrastructure and suggested that the charges for the same should be affordable.
- It was decided by consortium to meet in the month of October at IIT Bombay campus (tentative date – 25th of October 2013)

Ms. Ravina Aggarwal proposed the following key tasks and responsibilities distributed among the members:
- PUKAR will develop and conduct the research methodology
- IIT will develop the technological and infrastructure inputs
- Majlis will develop the outreach strategy in English and vernacular media highlighting the points of health, security and smart city.
- Mr. Amitabh Singhal will research and develop the financial model for the information and communication infrastructure.
- UDRI will continue working on the governance and advocacy

25th October 2013

Mumbai Development Plan- 2020- Consortium for Broadband Infrastructure meeting

Venue: IIT Bombay

Attendees:
Siddharth Pandit (UDRI)
Anit Patil-Deshmukh (PUKAR)
Amitabh Singhal, Shikha (Majlis)
Abhay Karandikar (IIT)

- Discussion took place about roles of each consortium participants. Participants also explained the scope of their respective projects being funded by Ford Foundation.

- The overall objective of the collaboration is to work on planning principles for broadband infrastructure deployment in Mumbai along with proposed land use. These principles will form inputs for Mumbai Development Plan (2014-34). Finally, with Mumbai as initial phase, the planning guidelines can be incorporated even in MRTP Act at the state level.

- Towards this, UDRI's scope will be identifying points of intervention for broadband planning through advocacy, Pukar will undertake socio-economic studies for broadband usage, IIT Bombay will be technology partner, Majlis will focus on public campaign/communications and Amitabh will focus on recommending financial models for deployment of universally accessible to internet/broadband.

- The proposed methodology comprises of Pukar performing socio-economic studies for broadband access. This study will also include Internet access through mobile and Internet/broadband access as a means of livelihood opportunities. The study is expected to throw light on broadband usage patterns especially in underserved/low income residential parts of Mumbai.

- The broadband access studies and existing land use will enable the team to plan design principles for city wide broadband deployment principles. This planning may include land use for broadband infrastructure at ward level also. The technology input for design will be provided by IIT Bombay.

- It emerged during the discussions that socio-economic survey to be undertaken by Pukar will be an important first step. Accordingly, Pukar will focus on undertaking this study as the top priority. (Dr Anita pointed out that Pukar team also needs to undertake studies in areas where TV white space pilots of IIT Bombay are going to be conducted but this study will be undertaken later as Mumbai DP-2020 is more time sensitive and therefore should be accorded top priority).

- Discussions also took place regarding possible pilot deployment in an underserved/low income area to demonstrate the efficacy of public broadband and are also essential to form the basis of realistic financial model/s for providing Universal coverage of Internet/broadband amongst the deprived community across MCGM area.   Post-deployment survey can bring out the impact of broadband.

- It was pointed out that the current Ford Foundation funded project of IITB is for TV white space deployment and not for pilot towards Mumbai DP.

- Resource requirements for such pilots need to be separately worked out.

- Discussions also took place for economic analysis of broadband infrastructure for Mumbai DP. This economic analysis can bring out the required investment and the economic impact of investments to be undertaken by MCGM. The associated business model may also be worked out for demonstrating the viability of the plan.

- If pilot deployment is undertaken, then cost analysis of pilot can form as an input for economic analysis of the overall Mumbai DP.

- Majlis will be working on public campaign for Mumbai broadband plan once the initial contours of planning are identified.

27th December 2013

Minutes of Consortium for the Internet Access study

Attended by:
Ravina Aggarwal, Program Manager (Ford Foundation)
Amitabh Singhal (Delhi)
Anita Patil-Desmukh, Aloke Thakore, Anil Kumar Valmiki , Kiran Sawant Sonia Srinivasan, Shrutika Shitole, Tejal Shitole and Sanjay Kadam (PUKAR)
Cyrus Guzder (Trustee, UDRI)
Pankaj Joshi (Executive Director, UDRI)
Siddharth Pandit and Omkar Gupta (UDRI)
Madhushree Dutta and Shikha Pandey (Majlis)
Abhay Karandikar (IIT Mumbai)

Venue: PUKAR Office, Bandra East, Mumbai

Discussions during the meeting

PUKAR Mapping website inauguration

- The consortium was given a brief introduction of the Mythologies of Mumbai project by the PUKAR team. The PUKAR team (Kiran) then spoke about the mapping website and the process that went into building it. Ravina Aggarwal then inaugurated the mapping website. The website www.mapmythologies.pukar.org.in is live.

Research wing of the internet access study

- The consortium decided that the research study conducted by PUKAR will first focus on Mumbai and then move in to the Wagholi and Vasai study.
- The final locations of the internet study was announced and debated. The final locations after the discussion were Girangaon, Gazdharbandh and Dharavi.
- The consortium decided that the deadline for the Mumbai study in the three areas will be April end as the numbers and data collected will have to put together for the DP.
- After the collaboration with Netforindia in Pune. Amitabh Singal and Ravina Aggarwal suggested that PUKAR indentify the main internet services providers in Girangaon, Gazdharbandh and Dharavi. These internet service providers can then be approached for collaboration to conduct pilots in the three areas.
- Ravina Aggarwal also suggested that surveys conducted by PUKAR should not be limited to only households in the three areas but also institutions like healthcare centres, anganwadi, municipal schools, ngos, kamghar kalyan kendras, self-help women groups , public spaces and emergency services.
- Points to keep in mind when PUKAR conducts surveys in institutions are how they use the internet in service delivery etc, affordability of internet service, inefficiencies in the system etc.
- PUKAR team will also map the institutions identified in the three areas.
- Ravina Aggarwal suggested that PUKAR and CCDS should meet and share ideas about their projects on the internet.
- The consortium decided that PUKAR will make the Consortium group mail id, google docs and Abhay Karandikar will make a wiki for the group.

MCGM Meeting on February 5, 2014

- Pankaj Joshi from UDRI announced that there will be a MCGM meeting about the DP plan on February 5, 2014. Venue for the meeting to be announced later.
- For the meeting, Members of the consortium will give a presentation of 7-10 mins each.
- PUKAR team will present their research study from Gazdharbandh area for the meeting.
- The consortium will meet on February 4, 2014 for a mock of the presentations to be presented.

Infrastructure for the Internet pilot in Mumbai

- Amitabh Singal and Abhay Karandikar will work together to build internet network maps for Girangaon, Gazdharbandh and Dharavi. Maps from one area of the study will be presented at the MCGM meeting.
- The map will track the inefficiencies in the system with respect to road digging by the BMC, multiple fibre lines, affability in services provided by internet service providers etc.

- Ravina Aggarwal suggested that the maps can be layered to show existing internet infrastructures and pre-planned organized fibre lines and connectivity designed by Amitabh Singal and Abhay Karandikar.

Role of Majlis- Media and campaign partner

- Ravina Aggarwal spoke about Majlis and its role in building effective media campaigns to help get the internet advocacy to the public.
- It was decided by the consortium that UDRI will help Majlis indentify different segments that the campaign needs to address, so that different campaigns can be effectively designed.
- Majlis will the accordingly plan the media strategy for dissemination.
- It was decided by the consortium some main focus areas of the campaign will be public voicing their opinion, internet access and Citizenship in Mumbai.
- Majlis will also take photographs and video for the current inefficiencies in the existing internet systems for the campaign.
- Madhushree Dutta also suggested that they will organize a meeting of journalists in Mumbai around May to introduce the study and start off the campaign.
- Majlis will also discuss responses with the consortium if there are any particular articles in the Media about the internet infrastructure and the study.

The meeting was followed by lunch.

5th February 2014

Meeting Minutes for Digital Inclusion workshop coordinated by IIT Mumbai

Venue: F/South Ward office, Conference Hall,
Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg, Parel, Mumbai 400012

Attendees:

Name	Organization
R. Balachandran	Nodal Town Planning Officer, MCGM
Dinesh Naik	Assistant Engineer, DP, MCGM
Abhay Karandikar	Professor and Head, Department of Electrical Engineering IIT-Bombay
Pankaj Joshi	Executive Director, UDRI

Dr. Anita Patil-Deshmukh	Executive Director , Pukar
Siddharth Pandit	UDRI
Omkar Gupta	UDRI
Kaiwan Elavia+ 2	UDRI
Shrutika Shitole	Pukar
Sadhana Guldagad	
Shikha Pandey	Majlis
Krithi Ramanathan	IIT Bombay
Sudhir Badami	
Gurujeet Singh	Student Journalism
Veena Takle	SCE
Ar. Y.R.Pathak	G.D.S. & Co.
Vasant patil	Indivisual
Shruti Menon	Narotam Sekhseria Foundation
Ar. Rahul Mayekar	MCGM
Sukhatme Shirish	PEATA (PRESIDENT)
V.S.Sahare	MCGM
A.D.Kshirsagar	MCGM
Irene N	Sir J.J. College of Architecture
Sitaram Shelar	YUVA
Unmesh Chaphekar	MTSU
Sanjay M.	BMC
Tejal Shitole	Pukar
Kiran Sawant	Pukar
Anagha Kamat + 1	Journalism Mentor
Sanjay Kadam +2	Pukar

Afrel	Majlis
Arnob Jon	IITB
Pruja Warekar	CAT
Sabu Francis	
Ashwini Thakar	Bombay First
Nagendra G. Mirajkar	Dy Mumbai Port
Sushil Shinde	Tarai Foundation Trust
Ravina Aggarwal	Individual
A.V. Shenoy	MVS
Alok Thakor	Citizen
Mahesh V. Bafna	Citizen
Munjal Savla	Citizen
Vibha Kaushal	Citizen
Prakash Angane	Janata Jagruti Munch
Meera Malegaonkar	BDH
Manoj Jeikar	MCGM

Minutes:

1. Mr.Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay) opened the session stating the intent of the workshop, goal for Digital Inclusion with Universal access to Broadband, Information and communication Infrastructure, in Mumbai Development Plan, 2014-34.

2. Executive Director (ED), UDRI during his presentation stated the following:

    a. Gaps exist in the optimum and existing levels of landuses in revision of Mumbai Development Plan (2014-34)
    b. Future urban paradigms are equitable and inclusive development with knowledge economies, collaboration, responsive governance, efficiency, crowdsourcing. These demands for digital inclusion in information and communication infrastructure with focus on broadband penetration in slums/low income households in city.
    c. Section 22(d) – Maharashtra Regional and Town Planning Act 1966. Mentions the extension and development of Transport and Communication Infrastructure.

d. During Development Plan of 1981-2001, MCGM has introduced and implemented telephone exchange / service centres. These interventions made a remarkable increase in telephone penetration in households in the following 20 years.

e. Similarly Development Plan for 2014-34 will need to have digital and broadband infrastructure. Because,
   • Universal access to knowledge, essential services and health facilities using internet technologies will lead to better quality of life.
   • Higher productivity for economic development.
   • Critical response in disaster management.
   • Efficiency in government data sharing and integration of resources.
   • Increased public participation.

f. Applications to Mumbai will be in various aspects like, education, health, disaster management, transportation, livelihood, governance, etc.

g. Elaborated these aspects stating its shortfalls and opportunities along with similar case studies.

h. MCGM will have to take an active role in
   • Creating a citywide middle mile infrastructure of optical fiber that would be enable access to internet
   • Making available of public and civic data publicly accessible on internet and multilingual

i. Suggested consolidated planning principles derived through various stakeholder's meetings
   • NECESSITY & DEMAND: Slums, low income households, 5 year implementation time frame, Universal access to broadband - Citizen's Right
   • IMPLEMENTATION GOALS: Municipal schools, libraries, fire stations, parks, transportation facilities, sewage treatment plants, 24*7 connectivity, Disaster Management, Private, municipal and public access points to broadband infrastructure.
   • ROLE OF MCGM: MCGM- Owner of Municipal Broadband, Right of Way Issues, MCGM – Online citizen services and Municipal Data, MCGM- Planning and Monitoring, Public – Private Partnerships
   • INFRASTRUCTURE: Scalable, Middle Mile – Citywide Optical Fiber, Technology Adaptable, 20 year usable timeframe.
   • OPEN PUBLIC DATA: Education, Healthcare, Transportation and Governance, All MCGM Data and services online, Efficiency, reduced wastage and corruption, improve internal working of MCGM.

j. Suggested approximate citywide landuse requirement:
   • Fiber optic service network that connects fiber to the curb (FTTC).
   • Mobile Switching Centers: 500 sq.m for every 3 wards = 4000 sq.m city wide
   • Network Operations Center: 3000 sq.m

k. Suggested Development Control Regulations:
   • New development/redevelopment proposals to incorporate optic fiber network
   • Public access points for broadband network in informal settlements & urban villages
   • Broadband connectivity and municipal wi-fi in Public spaces.
   • Fiber optic connectivity to all municipal services and ward offices.

l.   Planning for future demands of broadband in advance Ad-hoc development can be avoided.

3.   Dr. Anita Patil- Deshmukh, Executive Director - PUKAR, presented following findings of the study focusing on access to internet in low income communities of city. (Case of Gazdhar Bandh, H-West Ward, population of 50,000 and area of 2.5 Sq. Km).

   m.   PUKAR's role essentially was to bring to sharp focus the digital divide that exists in the poor income neighborhoods and the aspiration and needs of the marginalized people in relation to internet access
   n.   Various services are available on internet but urban poor can not avail them due to lack of internet access which ultimately is leading to discrimination in society.
   o.   65% of households in city are in low income group.
   p.   Findings of survey conducted within 459 households and 1377 individuals in selected area:
      • 85% people do not have internet at home
      • Most people earned between Rs.1000-15000 and are willing to spend between Rs 100-800 per month on internet. Average spending is Rs. 576 on internet.
      • While some of the critical services like admissions, results, applications for jobs and various identity cards are available on internet most poor people do not have an easy and affordable access to internet.
      • While 78 % people in this slum have heard about internet, 58% of those could not use it. 95% users belonged to age group of 14-30 years and as is the case with rest of domains, the gender divide continues within the digital divide as well with only 26 % female using internet while 74 % male usage.
      • Young male population is the major user of internet in the form of 2G network on mobile, which do not allow them to access to e-services provided by MCGM.
      • Most of the time the youth used internet for downloading either for entertainment or for school related projects (479 out 584 respondent) and social networking (477 out of 584). Very few could use it for any services (120 out of 584).
      • When asked why they do not use mobile for other things, three reasons came through. First was related to speed. Most mobile phones with a package provide 2G services, which do not allow them to use it for anything else due to very slow speed. The 3 G mobile packs are unaffordable to majority of the youth. So they all end up using other avenues for Internet access. Those were cybercafé (163 / 584) schools or colleges (142/584), offices (109/ 584)). Those who could not access these services at schools or offices also could not access them at cybercafés.
      • People cannot use Internet as only 2 cyber cafes are in the locality outside 1.5km radius, inaccessible and unsafe to female users.
      • 95% people think that MCGM has a role in providing affordable internet.
      • 87% people are willing to use internet provided in community areas and willing to pay for it.
      • Majority of them wanted it is a form of kiosk and they wanted it in an open space.
      • Dr. Patil-Deshmukh shared the information about all the services that are currently available on the internet and emphasized the fact that while some of the critical services like admissions, results, applications for jobs and various identity cards are

available on internet most poor people do not have an easy and affordable access to internet.

q. Recommendations for DP
   • Making Universal and Affordable Broadband Internet as an Obligatory responsibility of MCGM
   • Allocating space in the DP for building such networks in all communities especially low income households of Mumbai.

4. Mr. Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay), presented technical aspects of implementing universal broadband within the city.

   • The presentation focused on

      1. Broadband Network

      2. Current scene in Mumbai

      3. Role of MCGM in DP related to internet

      4. Case Studies

      5. Planning

   • Currently, there are 15 million broadband connections in the country. He mentioned that TRAI's roadmap predicts 600 Million broadband connections in the country by 2020. In general, averages in Metro like Mumbai are expected to be higher than national average. Thus, he emphasized that by 2030, Mumbai should aim for universal broadband access for every household. By 2030, a city wide network is expected to connect all residential and commercial establishments, public wifi-spots and public safety and disaster management network including 24 hour video surveillance.

   • If broadband speed of 2 Mbps as outlined in National Telecom Policy 2012 (which admittedly is a conservative estimate for 2030) was assumed, Prof Karandikar illustrated that universal access would require a whopping capacity of 50 Gbps/sq km in many areas of Mumbai with high population density even with such conservative estimates. He illustrated that this cannot be achieved with current cellular deployment of macro cells. The future evolution of wireless system is likely to be in the form of micro, pico and femto cells (collectively called small cells) which would be low power nodes with high spectral efficiency.

   • He outlined the vision of providing fiber to the curb and Small Cell deployment of wireless nodes for meeting the high capacity requirements of broadband to every household in Mumbai.

   • He informed that from DP perspective, MCGM has the following points of intervention-
      1. Right of Way for Fiber
      2. Creating Middle-Mile Network
      3. Zoning and Land use for Tower and Switching Infrastructure
      4. Building code for enabling broadband.

- He further elaborated that MCGM should create the concept of Telecom Corridors, lay conduits and tranches, build middle mile network and rent/lease the corridor to the service providers.
- Further, MCGM should mandate builders to provide ducts for optical fiber during construction itself. This would also enable In-Building solution. MCGM should also map all underground utilities including fiber ducts and should make it available for all service providers.
- In order to provide universal access for citizen services, MCGM should plan for providing free public hotspots, community kiosks and centers in designated locations. Mumbai DP should aim to provide broadband for citizen services in underserved locations and areas of the city as one of the most important charters.
- Mumbai DP should plan for Municipal broadband network. The municipal broadband networks can be overlaid over the same telecom corridor as outlined above. It should provide high speed connectivity to all municipal schools, hospitals and ward-offices. It can also act as the backbone for public safety and disaster management including Fire Brigade, Police and Ambulances.
- He also emphasized that municipal interventions for universal access have been carried out in several cities of the world. He presented two case studies of Stockholm and Oregon.
- Finally, he illustrated by taking example of Mumbai H /East ward that it is indeed possible to conceptualize Telecom Corridor which can also be used for Municipal broadband network. Further details of implementations can be worked out with detailed studies. However, he submitted that Mumbai DP for 2030 should outline the vision for Broadband for All.

5. Mr. Krithi Ramamritham, Head of Centre for Urban Science and Engineering, Presented challenges in bridging the information gap through digital inclusion, The highlights of the presentation are as follows:

- Connectivity divide- as there is no connectivity or low band width
- Content Divide- no relevant content, not accessible, not updated, language barriers.
- Interfaces are not user friendly.
- Main challenges are type of information to be provided, sources of information, process of getting information, department involved, time and fees required.
- Listed and categorized citizen services into one time information, continuous, paid, free etc.
- Suggested citizens mobile applications based on crowdsourcing.
- Four components of information Location, Visuals, Annotations, Category of problems.
- Suggested integrated approach through Planning and Design, Policy and Governance, Infrastructure, Informatics for better quality of life.
- He shared a few ideas related to technology based innovation like Mumbai Navigator that shows maps of the city with various bus and train routes and makes communing much easier. He suggested that technology needs to innovate and make the quality of life better for the citizens.

6. Mr. Aloke Thakur, academician, journalist and citizen, quoted Section 22(e) –chapter-3 from Maharashtra Regional and Town Planning Act 1966, to explaining the possibilities to incorporate internet in future Development Plan. This clearly mentions the right to common man for public utility.
    - The Act defines amenities and public utilities as public necessities, provision of internet infrastructure can be justified as this is the future necessity of every citizen
    - Currently the Internet facilities are seen as need of certain class of people, but Internet facilities provided by MCGM will make such it public services and can be reached to larger population.
    - Suggested provision of such Public utilities in Landuse Planning is the basic requirement.
    - Suggested to provide dark fiber to every household in similar way MCGM has provided water supply, sewerage lines and other infrastructure
    - Requested MCGM to have foresight and visionary attitude for Development Plan by clearly defining amenities responding to future necessities on people.

7. Mr. A.V. Shenoy, Mumbai Vikas Samiti, suggested providing facilities of higher standards keeping the vision for 2030.
    - MCGM should restrict its role in data maintenance and provision of basic network by providing primary and secondary server in respective wards and use existing laid network by privet companies to reach up to every household.
    - Stated hazards on health due radiation of Wi-Fi and mobile network should be considered while planning, Micro Cell technology is ideal solution.

8. Prof. Abhay Karandikar stated that principle concept of having right of way for broadband network is the priority, the implementation issues and strategies can be worked out in order to achieve standards.
    - Mentions the low power Wi-Fi network is low on radiation hazards and economic.
    - Stated that the new buildings should have a Code/ DCR to have optical fiber network and policies can be worked out to provide network in existing buildings
    - Providing Internet connectivity without the intervention of MCGM will not be citywide approach.

9. Mrs. Mira Mategaokar, citizen, stated that Development Plan should map the location of towers, and should give guideline in order to regulate radiation hazardless Broadband network. National level housing schemes should also include the provision of Broadband network in community.

10. Mr. Chaitanya Mehta, citizen, mentions opportunities and importance of technology and broadband in encouraging entrepreneurship in city which helps in economic development and contributes in GDP growth.

11. Sabu Francies, Architect & Software developer, suggests having a policy for crowdsourcing to implement the city wide broadband network. This will enable to connect the city without big efforts by single implementing authority. And to have incentives to individuals for contributing to City wide network.

12. Executive Director (ED), UDRI states that formal city can contribute in crowdsourcing but the informal city cannot be crowd-sourced for such infrastructure leading to exclusion.
    - Vision document requires to promising for Digital infrastructure when it mentions to have a global inclusive city by 2034.
    - Right of way for Broadband network has to be mention in Development plan.
    - All Municipal services to be connected via Internet.

13. Director of Public Forum, UDRI stated that basic Digital infrastructure should be provided by MCGM in similar way that basic water supply lines are provided by MCGM.

14. Mr. Sudhir Badami, Activists & citizen, mentions the importance of online services like ticket booking which has a remarkable economic value in saving time of travel, saving working hours in commuting at the location of service.
    - Also mentions the importance demarcating digital infrastructure on DP, in similar way MCGM has shown the future metro and monorail line.

15. Nodal Town Planning Officer, MCGM, stated to accept this new concept of Digital infrastructure, this will come under utility like many other utilities provided by MCGM,
    - There is no hindrance in implementing broadband infrastructure without including it in Development Plan, as road network is demarcated in DP, Broadband network can be laid below them, as there is no particular norm which prevents to have internet network below roads.
    - MCGM has a separate information technology department; they can manage the policies regarding the broadband networks in city.
    - DP-MCGM will make policy recommendations for including broadband and digital inclusion in Development Plan.
    - MCGM will consider the digital policy and zoning in terms of location of these facilities in Development Plan.
    - Network organization centres should be planned by separate agency in respective ward, it may not fall in Development plans Scope. In case it needs to integrate with Development Plan, MCGM will need to have inputs from separate agency showing, mapping the locations for such infrastructure. In previous years MTNL had suggested MCGM the desired locations of Telephone exchange in DP.
    - Development plan can provide Building Code to facilitate Broadband Infrastructure.
    - MCGM will include such digital infrastructure requirements in Development Plan report.

16. Engineer DP, MCGM, mentioned that detailed inputs from concern department have to come to development plan department regarding Digital Infrastructure.
    - Since the plan is for 20 years the landuse will demand for changes so Development plan cannot have inflexible policy and demarcated infrastructure.
    - Agreed to give enabling provisions for broadband infrastructure in development Plan.

17. Meeting conclude at 18.20 Hrs.

Planning principles and suggestions for Information & Communication Infrastructure in revised Mumbai Development Plan (2014-34)

Letters sent by UDRI & Stakeholder group to Municipal Corporation of Greater Mumbai (MCGM)

19th July 2013

Letter signed by Stakeholder group sent to Municipal Commissioner, MCGM to share developed set of planning principles to guide the **'Digital Vision'** for the city. The suggestion and recommendations are made by 'Stakeholder' Groups consisting of Researchers, former Government and local body officers, NGOs and experts like Abhay Karandikar (IIT Mumbai), Charles Correa, Shirsh Patel, Amita Bhide (TISS), D.M .Sukhtankar, Nishit Kumar (ChildLine India) , Makarand Narwekar, Madhushree Dutta (Majlis) and many more.

(These principles discussed in greater detail in Annexure I)

19th March 2014

Letter sent to Chief Engineer Development Plan, MCGM to share key strategies and recommendations for Digital Inclusion and Broadband Infrastructure in revision of Mumbai Development Plan (2014-34)
(Recommendations discussed in greater detail in Annexure)

Workshops attended for Information & Communication Infrastructure

Workshops attended by Siddharth Pandit, Director, UDRI organised by Centre for Internet & Society in Bangalore to engage in innovative exploration of open and interactive technologies.

Workshops attended by Omkar Gupta, Director, UDRI organised by Centre for Internet & Society in Pune to engage in exploration of open and interactive technologies.
[Omkar please insert photos]

Impact

- UDRI's main advocacy thrust this year was focused on integrating the need for information and communication infrastructure with emphasis on broadband as a key focus area is the Mumbai city's next Development Plan (2014-34).

- Integral to this advocacy and to UDRI's adopted methodology for bottom-up planning processes are the stakeholder principles for Information and Communication Infrastructure that were communicated to Mumbai's planning authority (Municipal Corporation of Greater Mumbai or MCGM), the Chief Minister of Maharastra and the Mayor of Mumbai.

- These principles were formulated after stakeholder meetings about the need for extending Information and Communication Infrastructure especially to the poor. The need for inclusion is reflected in the principles listed in Annexure 1. Principle 1 and 2 talk about the need to connect the infrastructure across poor households and municipal facilities which are primarily used by lower income and slum households. Principles 3 and 5 talk about the role of municipal agencies to bear the cost of middle mile infrastructure thereby distributing the costs over the entire city rather than leaving it to private sector, in the principle of equity. Principles 4 and 6 talk about the role of private sector in extending the last mile connectivity and programs shaped to the users. Finally principle 7 talks about MCGM adopting key program areas to disseminate information regarding Education and Health using this infrastructure.

- These principles were endorsed by former Municipal Commissioners of Mumbai, renowned urban planners like Charles Correa, IIT Mumbai experts, local elected representatives, educational institutions like JJ School of Architecture and Tata Institute of Social Sciences and many other NGO's working in areas of education, health environment, culture, livelihoods, women's safety etc.

- The Development Plan (DP) department in MCGM acknowledged that these principles needed attention in the current revision of the Development Plan (2014-34) and promised to include them in any land-use provisions for Mumbai.

- A participatory GIS platform, under the grant from Ford Foundation, is being developed with an aim to crowd source and shape urban planning and urban policy in Mumbai. This platform will assist local communities to report deficiencies within their neighborhoods, voice demands for basic needs for themselves in the development planning and collaborate with government to formulate the implementation and monitoring. (Kindly refer to the GIS section for more information)

- The print media has acknowledged the need for wifi and broadband infrastructure in the same week that the stakeholder principles were communicated to the MCGM. These news articles were carried upon in Times of India dated July 20, 2013 and July 21, 2013 and Hindustan Times dated July 20, 2013.

- The Marathi television news channel IBN Lokmat carried an interview in June with Dr. Ajit Ranade, chief economist of the Aditya Birla group. The interview discussed public participation and the role of broadband infrastructure in increasing access for the poor to e-services. The transcribed clip is uploaded to http://www.youtube.com/watch?v=dKQVE1Wz5h0

TILL HERE IS CORRECT

Geographical Information Systems

The Initiative:

UDRI is undertaking a task to develop GIS as a platform for information, an open source web based application to illustrate the use of digital technology for empowerment of slum communities. The precise requirements are data collection, software development, training of citizens and community groups to learn and leverage GIS and sharing of maps and analysis with MCGM.

A platform to engage the citizens, especially in slum areas to map the places for public services like schools, hospitals, aanganwadis etc. The current Development Plan excludes the detailed mapping of slum clusters, thereby raising the risk of exclusion in its planning institutions and mechanisms.

Ford Foundation has agreed to support this initiative for the years 2013-2015 under the Information and Communication Infrastructure grant.

What is GIS?

Defined by Wikipedia as a system designed to capture, store, manipulate, analyse, manage, and present all types of geographical data. The acronym GIS is sometimes used for geographical information science or geospatial information studies.

Defined by ESRI as a system that integrates hardware, software, and data for capturing, managing, analysing, and displaying all forms of geographically referenced information. GIS allows us to view, understand, question, interpret, and visualize data in many ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts. A GIS helps you answer questions and solve problems by looking at your data in a way that is quickly understood and easily shared. GIS technology can be integrated into any enterprise information system framework.

Objective:

- To gather needs and aspirations of the people
- To report any and all problems in the wards
- To monitor DP implementation
- To make it as an interactive public participation platform.

Three basic typologies of data that would be available are;

- GIS on desktop
- GIS as web based
- GIS as a Mobile app

UDRI initially made a contract with BIOND Software Tech. Pvt. Ltd in August of 2013 to procure all the data as shape-files, project files and the same that could be produced in the form of layers to get the big picture. An Open-source software called QGIS 2.1.0 was also purchased to start off with the layers and data procurement. The full database is updated by Postgres also known as SQL language which is used to update attributes and also to run analytical queries to show the result pictorially through GIS maps.

Table 1.0

Sr. No.	Web GIS Application +GIS Data
1	Mumbai Map data
2	Desktop GIS Installations

AMC: For the first year maintenance and data Upgradation is free. For each subsequent year it will be charged.

Thereafter UDRI has also purchased licences for ArcGIS 10.2 from ESRI in January 2014.

Software purchased from ESRI

Customer:	UDRI
Reference:	ESRI /AV/01/2013
Project:	ESRI ArcGIS Software Licenses
Date	Monday, September 23, 2013

Sr. No.	Description	Qty
1.	ArcGIS for Desktop Basic (Formerly ArcView) Single Use 10.1	1
2.	One year Warranty free from February 2014 to January 2015.	
3.	Additional two years Annual Maintenance Contract (AMC) from February 2015 to January 2017.	

ArcView: An Overview

ArcView is geographic information system (GIS) software for visualizing, managing, creating, and analysing geographic data. Using ArcView, you can understand the geographic context of your data, allowing you to see relationships and identify patterns in new ways.

With ArcView, you can

- **Author maps** and interact with your data by generating **reports** and **charts** and printing and embedding your maps in other documents and applications.
- **Save time** using map **templates** to create consistent style in your maps.
- Build process models, scripts, and workflows to **visualize** and **analyze** your data.
- Read, import, and manage more than **70 different data types** and formats including demographics, facilities, CAD drawings, imagery, Web services, multimedia, and metadata.
- **Communicate** more efficiently by printing, publishing, and **sharing** your GIS data and dynamic content with others.
- Use tools such as Find, Identify, Measure, and Hyperlink to **discover information** not available when working with static paper maps.
- Make better decisions and **solve problems** faster.

Key Features:

- **Map authoring**—Use predefined map templates to save time and make it easy to create a consistent style in your maps.
- **Spatial query**—Ask questions of your data and solve complex problems by using a variety of query-building tools: interactively **measure** distances and areas, **find** features in the map, **select** data by location or attribute, **unselect** all, **switch** the selection, access layer properties from the Identify dialog box, and much more. **Basic modelling** and **analysis**—Model spatial relationships and measure how features in a dataset relate to each other in space and generate reports and charts of the findings.

- **Simple feature editing** and **data integration**—Create and edit point, line, and polygon features and attributes within your data. Use a wide variety of data types including demographics, facilities, CAD drawings, imagery, Web services, and multimedia.
- **Ready-to-use datasets**—Begin your visualization and analysis right away with the included Data and Maps for ArcGIS Media Kit, which is updated annually and preconfigured to work specifically with ESRI software.
- **Enabled for extensions**—Add even more capabilities and extend the power of ArcView by using one or more of the many optional ArcGIS for Desktop extensions. Analysis, productivity, and solution-based extensions allow you to perform extended tasks such as raster geo processing and three-dimensional analysis.

Stakeholder's Meetings:

A number of stakeholders meetings were held to discuss about this huge platform being developed and nurtured by UDRI to promote GIS and its wide range of applications that could be applicable in a person's day to day life.

A list of Attendees in one of the stakeholders meeting held with respect to have GIS database for Mumbai.

Minutes of the Meeting:
Introduction and Presentation by Pankaj Joshi, UDRI – *"GIS database for Mumbai"*

Objectives of the project discussed in the meeting were:
- Gathering needs and aspirations of people
- Reporting existing problems in wards
- Monitoring DP implementation

Three basic typologies of data would be available:

- GIS on Desktop
- Web-based
- Mobile app based

Scope of work for MCGM in the project was also discussed, considering the database it holds.

An example of a similar initiative in Jalandhar/Ludhiana for pothole tracking and electoral watch activities was mentioned. It was suggested that this would make the GIS project proposal more acceptable to the MCGM as another state government has already implemented it with success.

Presentation by BIOND – *"Interactive Public Participation Platform – GIS"*

1) Collaboration with MCGM for listing down the parameters of Census data to determine density with respect to wards (Metro station)
2) GIS/GPS Integration for Mumbai Police control room (Police service vehicle provided with locations and coordinate details for easy tracking)

3) Bio-remediation of Powai Lake (Ground control points for accuracy)
4) App for MahaNagar Gas Limited

Common Discussion:

MCGM should have an overlay of Time Series on the maps. The Base map should be very accurate (ground control points) and in vector format. The satellite document cannot be queried but a layering of vector data can be done.

The data with respect to entire Mumbai can be validated across other databases. It was suggested that MMRDA to be involved in the project for increased credibility. The entire process can be self-operated based on the citizen's responses.

Developing real time data would enhance the database. GPS has simplified activity mapping. Upfront cost is high but the running costs are minimal, thus, making it a feasible option for implementation.

It was suggested that UDRI should take up consultancy role for GIS platform facilitating:

- Mapping of Informal Livelihood activities
- Establishment of correlation between several factors (e.g. Open Space and health/ Transportation and Livelihood) and developing a grid/network for the same.
- Reverse analytical tools

Topography studies for determining vulnerability of coast-line (e.g. Simulation model for comparing flood lines of cities like Mumbai and Manhattan).

Layers of data required –

- Carrying capacity of data
- CTS Data
- CRZ Data
- 1967 DP copies to be scanned
- Assessor collector department
- Travel data
- Efficient free Wi-Fi model to cater all classes of society (adaptive re-use of telephone booths as Wi-Fi kiosks)
- Base map preparation
- Land Use/Building Use(with the help of property tax data from MCGM)

The "Cityscan" app developed by PRAJA can be used as a source of statistical surveys for developing the base map.

Social networking can be used to generate data and facilitate the use of mobile and web GIS.

A list of Attendees in one such meeting:

Vineet Shroff	BIOND

Milind Dalvi	BIOND
Nitai Mehta	Praja
Milind Mhaske	Praja
Shirish Patel	SPA
Ajit Ranade	Aditya Birla Management
Arnav Milkani	UDRI
Jamshed Kanga	UDRI
Cyrus Guzder	UDRI
Anuj Bhagwati	UDRI
Pankaj Joshi	UDRI
Omkar Gupta	UDRI
Siddharth Pandit	UDRI
Lakshmi Krishnakumar	UDRI
Amit Devale	UDRI
Mayura Gadkari	UDRI
Soumya Mishra	UDRI

Project Time Line
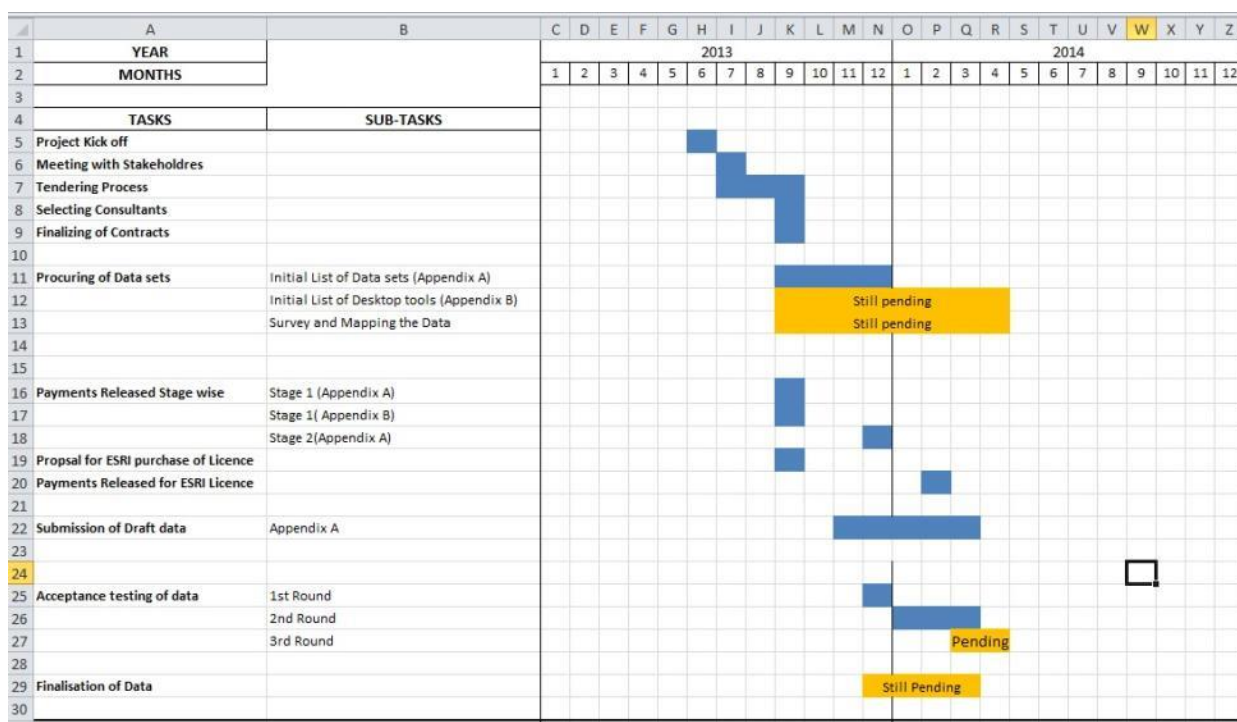
Showing timeline for the GIS project

The Data Procured on QGIS:

A comprehensive data on the city was collected. A set of 16 thematic layers were created and within them a subset of 175 data layers were also added to them. Thematic layers such as;

- **Base Layer**
  - Delineation of the whole of Mumbai
  - Outer city Boundaries (MCGM and ELU wise)
  - Buildings
  - Section boundaries
  - Election ward
  - Pin codes
  - Topographical maps (Contour maps)
  - CTS numbers
  - CRZ boundaries
- **DP Maps and Data**
  - DP 1981 with Reservations
  - ELU 2013
  - Ward wise Land use maps
  - Land use category wise maps
- **Education**
  - Primary, secondary and higher secondary schools
  - MCGM primary and secondary schools
  - Colleges (Senior and Junior)
  - Polytechnics and Technical institutes
  - Aanganwadis
  - Teacher Student Ratio in MCGM schools
  - Retention and Dropout rates
- **Transportation**
  - Road network (existing and proposed)
  - Bridges and Flyovers
  - Subways
  - Railway network (Western, Central, Harbour, Metro and Mono rail) existing and proposed
  - Ferry terminals
  - Airport
  - Road accident prone spots
  - Heavy peak time traffic roads
  - Heavy Pedestrian congestion roads
- **Health**
  - MCGM maternity and post-partum centres
  - Peripheral Hospitals
  - Hospitals (All categories included i.e. Municipal, Private, Multispecialty etc)
  - Cemeteries
  - MCGM Health posts
  - MCGM dispensaries
  - Maternal and Infant mortality rates
  - Birth and Death rates
  - Children with disability
  - Disease reports
  - Provision of health services
- **Housing**
  - Gaothans
  - Night shelters
  - Hostels
  - Slum boundaries
  - MHADA Housing
  - Transit Camps
  - FSI applicable and consumed for cessed buildings
  - Cessed buildings
  - Ready Reckoner (2007 to 2013)
- **Environment**
  - Saltpans
  - Rivers, Creeks and Natural courses
  - Lakes, swimming pools
  - Playgrounds
  - Recreational grounds
  - Parks and gardens
  - Beaches
  - Promenades
  - Tree counts
  - Forests
  - Mangroves
  - Mudflats
  - Inter tidal zones
  - Hill slopes
  - Flood prone areas
  - Vulnerable settlements
  - Cyclone prone areas

- o Locations having storage of Hazardous goods
- o Open spaces and water bodies Inventory
- o Inventory of Environmental features
- **Water and Sanitation**
  - o Storm water pumping stations
  - o Sewage treatment plants
  - o Sewage pumping stations
  - o Water treatment plants
  - o Water pumping stations
  - o Toilet blocks in slums
  - o Public and private toilets
  - o Settlements not served by sewer lines
  - o Open well locations
  - o Percentage of unfit water samples
- **Waste Management**
  - o Dumping Grounds
  - o Composting centres
  - o Transfer stations
- **Urban Form**
  - o ASI sites and buffer zones
  - o World heritage sites and buffer zones

- o State archaeological sites
- o Heritage buildings
- **Governance**
  - o Ward office locations
  - o Police stations
  - o Fire stations
  - o Courts
  - o Crime locations
- **Livelihood**
  - o Employment centres
  - o Municipal markets
  - o Shops and establishments
  - o Hawkers data
  - o Employment rate
- **Social Amenities**
  - o Theatres
  - o Art galleries
  - o Museums
  - o Auditoriums
  - o Shopping Malls
- **Miscellaneous**
  - o Places of worship

GIS Sample Maps:

- **Existing Land Use Map**

LEGEND

Existing Land Use catagories

- Cemetery
- Commercial Activities
- Communication
- Educational Amenities
- Government Office
- Industrial Use
- Law and Order
- Medical Amenities
- Municipal Chowkies
- Municipal Market
- Municipal Office
- Natural Areas
- Other Offices
- Primary Activity
- Public Utility and Facity
- Residential
- Slum / Cluster
- Social Amenities
- Town Duty / Octroi Office
- Transport
- Unclassified
- Under Construction
- Urban Villages
- Vacant
- Water
- Area Under SPA
- Informal Market
- Open Spaces
- Swimming Pool

MAP NO:DP01

Coordinates
19.08° N, 72.84° E

Project Name - **MUMBAI - GIS DIGITAL INCLUSION**

EXISTING LAND USE MAP

- Proximity Analytical Map
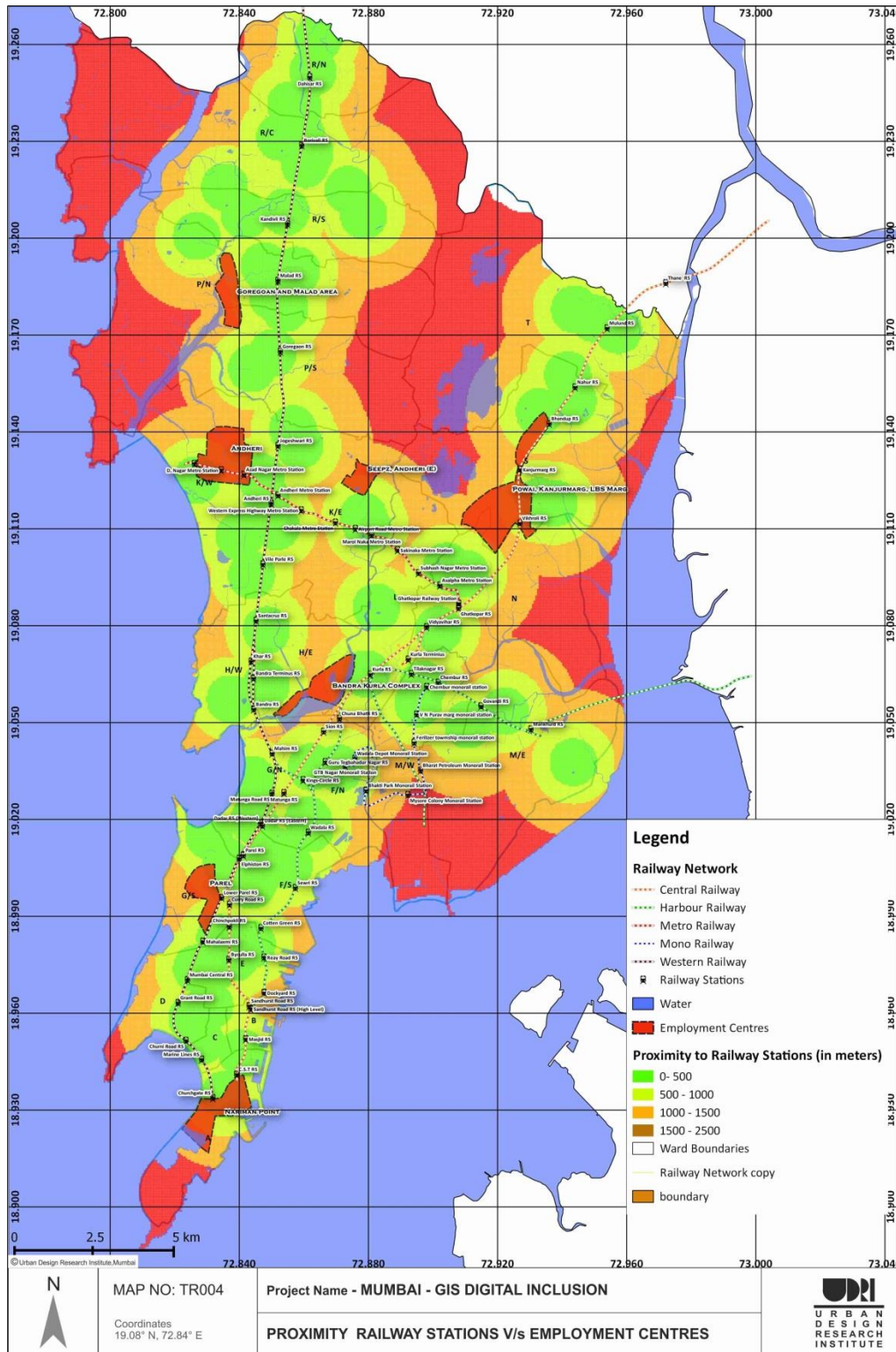
- Existing Natural and Open Spaces in Mumbai

Legend
- Recreation_ground
- Park
- Play Grounds
- Forests
- Mudflats
- Mangroves
- Hillslopes
- Water

MAP NO:ENV001

Coordinates
19.08° N, 72.84° E

Project Name - MUMBAI - GIS DIGITAL INCLUSION

NATURAL AND OPEN SPACES
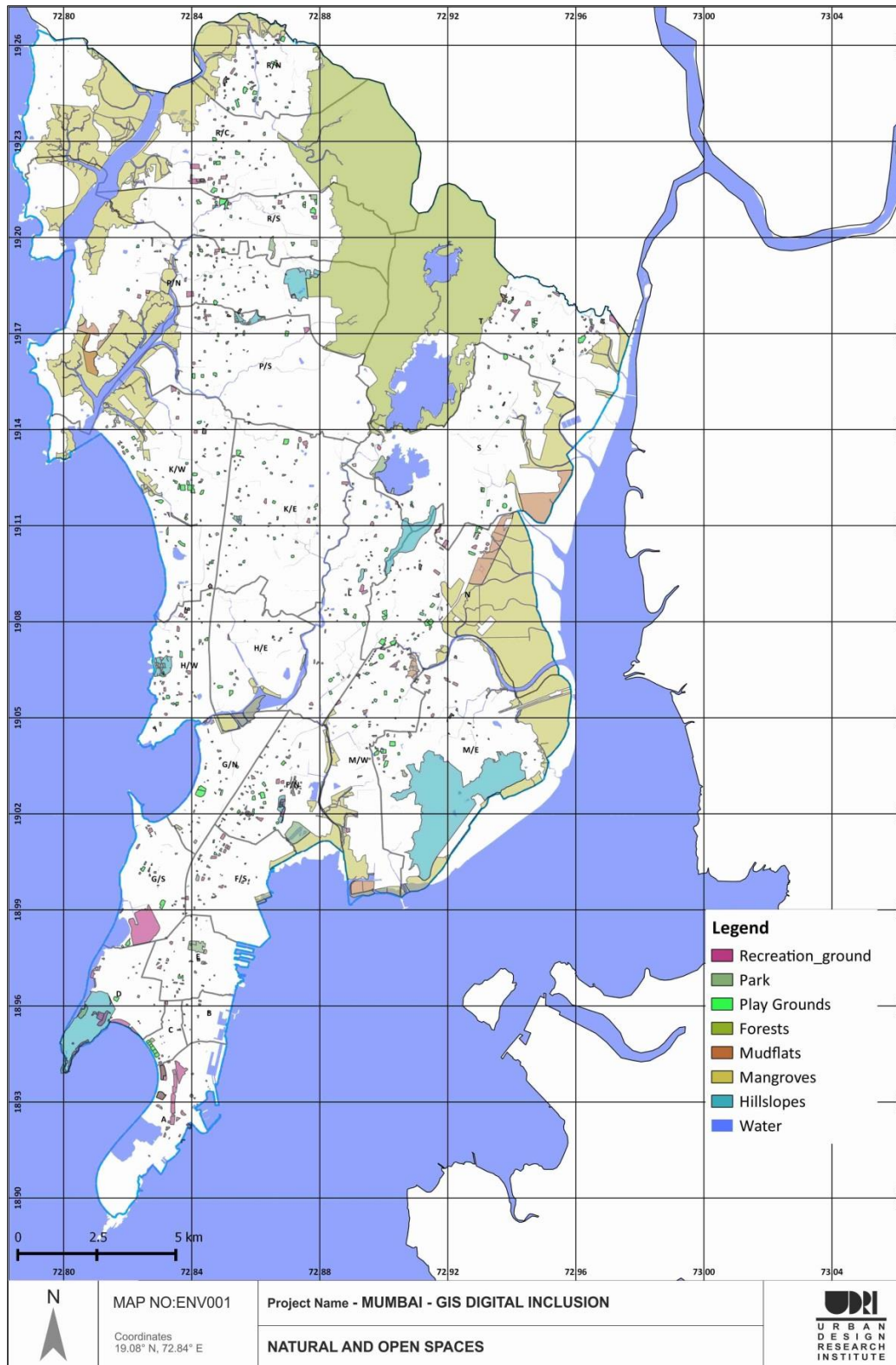
DP24seven Project Strategies

The UDRI will address issues of twenty four wards through a mix of involvements and through various stakeholders (ex. academic institutions, ward offices, ALMs, citizens groups, NGOs slum societies) as not any one group is truly representative of all the stakeholders. The issue of geographically covering the city shall also involve a mix of neighbourhood level, ward level involvement as well as groups of wards or zones as the boundaries of wards are useful in addressing data collected through government records and fall short of understanding the functioning of the neighbourhood.

Many strategies are being adopted by the UDRI in its development plan public participation initiative. These are:

1. Studios with architecture students to do ward level surveys
2. Formulating Expert Panel of City Stakeholders to provide recommendations to the MCGM in the form of a 'People's Brief' on various topics such as Housing, Health, Education, Environment, Public Space, Water Supply and Sanitation, Energy, Transportation, Livelihood, Governance and Urban Form
3. Finalizing Combined Stakeholder Principles for the Development Plan
4. Networking with NGOs to provide ward level feedback
5. UDRI DP web presence and resource base
6. Public exhibition and awareness building campaigns
7. Sharing with the MCGM and the DP core group on the learning's from the Public Participation Process.

1.0   Comments of the ELU published by the MCGM (OMKAR to update)

2.0   Stakeholder Group Meetings

KME add from ICI document

Information and Communication Infrastructure

UDRI's MumbaiDP24seven initiative is designed to integrate the needs of the citizens in an inclusive and bottom up approach and advocate for these needs to be included in Mumbai's Development Plan.

As a part of this initiative, 11 planning areas were identified and emphasized by key stakeholders. The stakeholders ranging from citizens, community based organizations, local ward representatives, NGOs, planning experts have identified water, housing, sanitation, education etc. as the emphasis areas that needed to be integrated into the Development Plan.

 A key area that was identified but hadn't evolved yet, in the 20 year vision for Mumbai, was of Information and Communications Infrastructure for which UDRI sought a grant from Ford Foundation. The grant requested was $200,000 for a two year period. UDRI intended this grant for research and documentation, capacity building and advocacy tasks under the Information and Communications Infrastructure (ICI) project for its MumbaiDP24seven initiative.

Ford Foundation accepted UDRI's proposal. The project was initiated for a 2 year period 2013-2015. The grant will fund the development of ICI vision for Mumbai and the development of a GIS platform.

Project Objectives

UDRI's key objectives in the Information and Communications Infrastructure project are to adopt public participatory mechanisms in developing the 'Digital Vision' as a major input into the Development Plan preparation process. UDRI strategically aims to achieve the following objectives

•   Incorporate into the Development Plan, a Digital Vision for the City of Mumbai that focuses on Universal Access to Information and Communications Infrastructure especially in the urban communities.

•   Develop with input from all stakeholders, guidelines in the areas of infrastructure planning, for Internet and Broadcast network communication, to realize this Digital Vision.

•   Develop a web enabled GIS application to illustrate the use of digital technology for empowerment of slum communities. The precise requirements and type of application will be explored in the consultative process.

Given these objectives, UDRI proposes, a multi-pronged approach focusing on
- Research and Documentation
- Capacity Building
- Dissemination

The specific subtasks were held through a consultative process. The list of meetings with the attendees is shown below

Date and Venue	Subject of Meeting	Attendees	Important Outcomes
4th June 2013, UDRI	Media Survey and broadband planning	IIT Mumbai, UDRI, PUKAR, MAJLIS, PRAJA, Childline India	1st Draft of planning principles formulated. Understanding of media access in slums in Mumbai
18th June 2013, UDRI	Public Consultation Meeting	UDRI, IIT Mumbai, Indian Red Cross, BEAG, Hindustan Times, BUILD, MAJLIS, CRIT, KRVIA, G5A Foundation	Public comments on planning principles sought. Public information and advocacy launched
13th July 2013, UDRI	GIS Database for Mumbai	BIOND, PRAJA, Shirish Patel Associates, Aditya Birla Management, UDRI	GIS data needs for urban planning and problem reporting in Mumbai
19th July 2013	Planning principles for Broadband finalized and sent to CM-Maharastra, MC-MCGM and Chief Engineer- DP		
25th July 2013	Planning principles for Broadband finalized and sent to Mayor-Mumbai		
3rd September 2013, UDRI	Stakeholder roles discussion	IIT Mumbai, UDRI, Ford Foundation, MAJLIS, PUKAR, Journalism.org.in, NIXI, Telxess Consulting	Tasks for research, advocacy, survey and public campaign finalized
25th October 2013, IIT	Tasks Review	IIT Mumbai, UDRI, PUKAR, MAJLIS, Telxess Consulting	Draft Surveys for internet penetration and slum areas identified
27th December 2013, PUKAR	Tasks Review	IIT Mumbai, UDRI, Ford Foundation, PUKAR, MAJLIS, Telxess Consulting	Draft Survey circulated and finalized, areas for survey finalized.

4th June 2013

Meeting Minutes and Action Items List

Attendees:
Cyrus Guzder, Anuj Bhagwati (Trustee UDRI)

Pankaj Joshi (Executive Director UDRI) Siddharth Pandit, Omkar Gupta (UDRI)

Prof. Abhay Karandikar, Head of Electrical Engineering, (IIT Bombay)

Anita Patil Deshmukh (PUKAR)

Milind Mhaske, Kaustubh Gharat (PRAJA)

Nishit Kumar (ChildLine India)

Shikha Pandey (Majlis)

Vaibhav Saboo, Rohan Pillai, Sravya Chebrolu (IIT Bombay)

Minutes:

- The meeting was organized to discuss and finalize the planning principles to guide the inclusion of broadband infrastructure in revision of the Mumbai Development Plan (2014-34).

- Anita Patil Deshmukh from Pukar presented the key findings from the survey conducted by PUKAR across Mumbai to gauge access to digital media. The findings corroborated the need for need of wider broadband access across the city. Some key findings from PUKAR survey are
    o 25% of people surveyed did not have internet access
    o Of the people that do, majority of them access it through mobile devices.
    o 81% of the internet users are between ages of 15-30.
    o 70% of the people have mobile phones.

- The planning principles were discussed. These are
    o All households, especially the slum and lower income households should be connected to broadband infrastructure within 5 years. The city will integrate universal access (all persons are covered) and inclusiveness (access irrespective of socioeconomic variation) in its planning for broadband infrastructure.

    o All municipal facilities such as municipal schools, municipal libraries, municipal medical facilities, fire stations, police stations, municipal parks, sewage treatment plants, pumping stations, transportation facilities etc. should be connected 24*7 to broadband infrastructure. There should be sufficient redundancy built into the infrastructure to keep these facilities connected for disaster management and emergency response and rescue.

    o The Municipal Corporation should be the planning and monitoring agency responsible for deploying the broadband infrastructure. Firstly, it should be the owner of municipal broadband network that will connect to municipal facilities and break the digital divide that exists in low income and slum households. Secondly, it should develop standard practices to follow for digging up of the roads and solving right-of-way issues if any, before broadband infrastructure gets installed by private telecom companies. Finally, it should offer all citizen services and municipal content on the web for delivering efficiency and accountability to the citizens. There should be specific targets for penetration of broadband infrastructure every 5 years in terms of users and/or

geographical wards in the city.

- o The private sector may be engaged in laying down the infrastructure over the last mile, deploying the programs and content to harness the infrastructure.

- o The infrastructure should be scalable and technology neutral. As the content becomes increasingly digital (video based) and as the cost of devices continue to drop, the number of users seeking broadband will continue to increase. The number of dark fibres should be sufficient to accommodate these users 20 years hence.

- The stakeholders agreed that broadband infrastructure was the need of the moment and will help facilitate delivery of services, reduce corruption and improve the accountability of the city administration. Examples of Singapore, Finland, the Indian Railways and even Mira Bhayandar point to the successes of adopting e–way of doing things.

- There should be some space and role for community internet, similar to community radio or television to improve understanding the interpretation of knowledge in a communal manner.

- Universal access should be a citizen's right. This does not directly translate to unlimited broadband access with connections to every household but a combination of private, municipal and public access to broadband infrastructure should be present.

- The MCGM should be encouraged to apply to the Universal Service Obligation Fund (of about Rs 40,000 crore) to build this infrastructure in Mumbai and especially to low income and slum areas.

- MCGM should move all its citizen services online to reduce wastage and corruption.

- The meeting concluded with Executive Director, UDRI requesting the stakeholders to get together on 18th June 2013, to sign the planning principles document as well as to invite other larger stakeholders to do the same.

Meeting Minutes

- In our constant endeavour to make the Mumbai Development Plan **Open, Equitable** & **Efficient**, the Urban Design Research Institute, with inputs from its DP stakeholders, has identified Information and Communications Infrastructure as a critical focus area for the city. The stakeholders have devised a set of principles focusing on need for broadband infrastructure in Mumbai, especially for slums and low income households. With the Government increasingly putting its services on the Net, the UDRI believes access to broadband infrastructure must be regarded as a **Citizen's Right**.

- Universal Access to Broadband infrastructure is important because it spells:
    - Access to **knowledge**, especially for urban slums and low income households.
    - Access to **essential services** such as e-education and e-health leading to better quality of life.
    - **Higher productivity** leading to economic development
    - **Co-ordination and critical response** in times of disaster management, accidents, etc.
    - **Efficiency** in government functioning through sharing and integration of resources, data, etc.
    - **Increased public participation** due to e-governance and open public data.

- To this end, the UDRI has devised a set of planning principles which were discussed in a meeting with various city stakeholders. Those present included experts like Professor Abhay Karandikar (IIT Mumbai), Madhushree Datta (Majlis), Anita Patil Deshmukh (PUKAR), Hema Ramani (BEAG) and urban planner Prasad Shetty (MMRDA Heritage Committee).

- At the end of the meeting, it was agreed that these principles would be put forward to the MCGM to be included in the DP. Some of the highlights are:

    - **All households, especially slum & low income, should be connected to broadband infrastructure within 5 years**

    - **All municipal facilities connected 24x7 too. These facilities should be integrated for disaster management and emergency response.**

    - **MCGM should be the planning and monitoring agency responsible for deploying broadband infrastructure. It should offer citizens services and municipal content on the web.**

    - **The infrastructure should be scalable and technology neutral.**

    - **MCGM should move ALL its citizen services, like health, transport, education, etc, online to improve efficiency of service delivery.**

- These planning principles will be signed by all stakeholders and sent to the MCGM in a few days

18th July 2013

Meeting Minutes and Action Items List

Attendees:

Cyrus Guzder (Trustee UDRI)
Pankaj Joshi (Executive Director UDRI)
Siddharth Pandit, Omkar Gupta (UDRI)
Dr. Ajit Ranade (9:30 am)
Prof. Abhay Karandikar, Head of Electrical Engineering (IIT Bombay) - 12:30 pm

Minutes:

- The meeting was organized to revisit and discuss the strategy for advocating for municipal broadband in view of the impending 4G launch. The CM's office has evinced interest in making Mumbai the first smart city in Mumbai but is sceptical if the 4G technology will pre-empt any municipal wireless plan.

- The consensus was that deployment of municipal wireless was a complicated situation primarily due to lack of revenue model   to fund the huge capital costs for building the infrastructure. So though the marginal costs would be low to attract every additional user, there has to be sufficient minimum number of users to justify the building of this fibre network.

- With the reported number of 4G towers to be deployed all over Mumbai, totalling anywhere between 10,000 and 40,000, it is imperative that that the laying down of ducts for backhaul network (primarily a fibre optic network) be done by MCGM. The private telecom agencies can deploy their own fibres but the ducts will be installed by MCGM.

- In summary, the 4G and municipal wireless network will complement each other without any fears of loss of revenue. The MCGM will continue to earn revenue as it is currently for leasing out ducts, right of way etc.

- A piecemeal approach was advocated to demonstrate success to MCGM and state government. DSL technology over existing copper lines can be used to enable wifi access at PCO booths. Other suggested sights were bus depots, municipal parks, libraries etc.

- USO fund can only be tapped for access to underserved areas where private telecom agencies might not find it economical to expand their fibre optic network.

- The meeting concluded with Mr. Guzder and Pankaj Joshi requesting the presence of Dr. Ranade and Dr. Karandikar for possible meetings with the Principal Secretary to CM and CM's office.

3rd September 2013

Meeting with Ford Foundation

Attendees:

Ravina Aggarwal (Ford Foundation)

Prof. Abhay Karandikar (Head of Electrical Engineering, IIT Bombay)

Cyrus Guzder (Trustee, UDRI)

Anita Patil-Deshmukh (PUKAR)

Amitabh Singhal (Telxess Consulting)

Mr. Aloke Thakore (Foundation for Excellence in Journalism)

Shikha Pandey, Paroma Sadhana (Majlis)

Pankaj Joshi (Executive Director, UDRI)

Siddharth Pandit, Omkar Gupta, Sarath Babu, Mayura Gadkari (UDRI)

Minutes:

- The Mumbai consortium meeting was organized to discuss and finalize the guidelines regarding the broadband infrastructure and its inclusion in the Mumbai Development Plan (2014-34).

- The agenda of the meeting was:
    - The relevance of the inclusion of all sections of people in the planning process. The need of the Development plan 2034 to envisage the services required for the people of the city for the next 20 years.
    - Universal access to people as a serious concern, considering that most of the services and information provided by public offices are through internet and more than 70% of the population don't have access to it.
    - Creating awareness among people regarding the need of universal access to all. Campaigns for making people aware of the fact that provision of universal access to the information can lead the inclusive planning process in a better way.
- The major outcomes of the meeting were:
    - The MCGM will have to plan accordingly to preserve the urban form and visual quality of the city which will not be altered by the provisions of broadband infrastructure. Thus

corporation have to make plan for the special network architecture which is scalable and accessible and also coexist with all the service providers' network architecture.

- o The public institutions of MCGM such as municipal schools, municipal libraries, municipal medical facilities, fire stations, police stations, transportation facilities etc. should be connected 24*7 to broadband infrastructure. Through the provisions of internet at public institutions, people of all sections can be brought under the umbrella of universal access.

- o Pilot demonstration project is required to create awareness regarding the benefit of universal access to the people. As a part of that, one area with all sections of people from the city to be selected to demonstrate the project.

- UDRI shared the key outcomes of its governance and advocacy efforts to include ICI infrastructure as a part of the Mumbai Development Plan 2014-34.
- UDRI suggested giving open access to the Kalaghoda area during Kalaghoda festival as a pilot project.
- Everyone had a consensus over the fact that a city level task force for broadband infrastructure is required to prepare guidelines and speed up the process.
- It was suggested that cities such as Hong Kong, Kuala Lumpur and city from Vietnam be considered as part of case study before pilot project.
- Special mail group and project management cloud to be created to improve the coordination and communication among the stakeholders of the consortium.
- Stakeholders agreed to meet quarterly to ensure and monitor the progress of different activities.
- Consortium also discussed about the financial plan of broadband infrastructure and suggested that the charges for the same should be affordable.
- It was decided by consortium to meet in the month of October at IIT Bombay campus (tentative date – 25th of October 2013)

Ms. Ravina Aggarwal proposed the following key tasks and responsibilities distributed among the members:

- PUKAR will develop and conduct the research methodology
- IIT will develop the technological and infrastructure inputs
- Majlis will develop the outreach strategy in English and vernacular media highlighting the points of health, security and smart city.
- Mr. Amitabh Singhal will research and develop the financial model for the information and communication infrastructure.
- UDRI will continue working on the governance and advocacy

25th October 2013

Mumbai Development Plan- 2020- Consortium for Broadband Infrastructure meeting

Venue: IIT Bombay

Attendees:
Siddharth Pandit (UDRI)
Anit Patil-Deshmukh (PUKAR)
Amitabh Singhal, Shikha (Majlis)
Abhay Karandikar (IIT)

- Discussion took place about roles of each consortium participants. Participants also explained the scope of their respective projects being funded by Ford Foundation.

- The overall objective of the collaboration is to work on planning principles for broadband infrastructure deployment in Mumbai along with proposed land use. These principles will form inputs for Mumbai Development Plan (2014-34). Finally, with Mumbai as initial phase, the planning guidelines can be incorporated even in MRTP Act at the state level.

- Towards this, UDRI's scope will be identifying points of intervention for broadband planning through advocacy, Pukar will undertake socio-economic studies for broadband usage, IIT Bombay will be technology partner, Majlis will focus on public campaign/communications and Amitabh will focus on recommending financial models for deployment of universally accessible to internet/broadband.

- The proposed methodology comprises of Pukar performing socio-economic studies for broadband access. This study will also include Internet access through mobile and Internet/broadband access as a means of livelihood opportunities. The study is expected to throw light on broadband usage patterns especially in underserved/low income residential parts of Mumbai.

- The broadband access studies and existing land use will enable the team to plan design principles for city wide broadband deployment principles. This planning may include land use for broadband infrastructure at ward level also. The technology input for design will be provided by IIT Bombay.

- It emerged during the discussions that socio-economic survey to be undertaken by Pukar will be an important first step. Accordingly, Pukar will focus on undertaking this study as the top priority. (Dr Anita pointed out that Pukar team also needs to undertake studies in areas where

TV white space pilots of IIT Bombay are going to be conducted but this study will be undertaken later as Mumbai DP-2020 is more time sensitive and therefore should be accorded top priority).

- Discussions also took place regarding possible pilot deployment in an underserved/low income area to demonstrate the efficacy of public broadband and are also essential to form the basis of realistic financial model/s for providing Universal coverage of Internet/broadband amongst the deprived community across MCGM area. Post-deployment survey can bring out the impact of broadband.

- It was pointed out that the current Ford Foundation funded project of IITB is for TV white space deployment and not for pilot towards Mumbai DP.

- Resource requirements for such pilots need to be separately worked out.

- Discussions also took place for economic analysis of broadband infrastructure for Mumbai DP. This economic analysis can bring out the required investment and the economic impact of investments to be undertaken by MCGM. The associated business model may also be worked out for demonstrating the viability of the plan.

- If pilot deployment is undertaken, then cost analysis of pilot can form as an input for economic analysis of the overall Mumbai DP.

- Majlis will be working on public campaign for Mumbai broadband plan once the initial contours of planning are identified.

27th December 2013

Minutes of Consortium for the Internet Access study

Attended by:
Ravina Aggarwal, Program Manager (Ford Foundation)
Amitabh Singhal (Delhi)
Anita Patil-Desmukh, Aloke Thakore, Anil Kumar Valmiki , Kiran Sawant Sonia Srinivasan, Shrutika Shitole, Tejal Shitole and Sanjay Kadam (PUKAR)
Cyrus Guzder (Trustee, UDRI)
Pankaj Joshi (Executive Director, UDRI)
Siddharth Pandit and Omkar Gupta (UDRI)
Madhushree Dutta and Shikha Pandey (Majlis)
Abhay Karandikar (IIT Mumbai)

Venue: PUKAR Office, Bandra East, Mumbai

Discussions during the meeting

PUKAR Mapping website inauguration

-   The consortium was given a brief introduction of the Mythologies of Mumbai project by the PUKAR team. The PUKAR team (Kiran) then spoke about the mapping website and the process that went into building it. Ravina Aggarwal then inaugurated the mapping website. The website www.mapmythologies.pukar.org.in is live.

Research wing of the internet access study

-   The consortium decided that the research study conducted by PUKAR will first focus on Mumbai and then move in to the Wagholi and Vasai study.
-   The final locations of the internet study was announced and debated. The final locations after the discussion were Girangaon, Gazdharbandh and Dharavi.
-   The consortium decided that the deadline for the Mumbai study in the three areas will be April end as the numbers and data collected will have to put together for the DP.
-   After the collaboration with Netforindia in Pune. Amitabh Singal and Ravina Aggarwal suggested that PUKAR indentify the main internet services providers in Girangaon, Gazdharbandh and Dharavi. These internet service providers can then be approached for collaboration to conduct pilots in the three areas.
-   Ravina Aggarwal also suggested that surveys conducted by PUKAR should not be limited to only households in the three areas but also institutions like healthcare centres, anganwadi, municipal schools, ngos, kamghar kalyan kendras, self-help women groups , public spaces and emergency services.
-   Points to keep in mind when PUKAR conducts surveys in institutions are how they use the internet in service delivery etc, affordability of internet service, inefficiencies in the system etc.
-   PUKAR team will also map the institutions identified in the three areas.
-   Ravina Aggarwal suggested that PUKAR and CCDS should meet and share ideas about their projects on the internet.
-   The consortium decided that PUKAR will make the Consortium group mail id, google docs and Abhay Karandikar will make a wiki for the group.

MCGM Meeting on February 5, 2014

-   Pankaj Joshi from UDRI announced that there will be a MCGM meeting about the DP plan on February 5, 2014. Venue for the meeting to be announced later.
-   For the meeting, Members of the consortium will give a presentation of 7-10 mins each.
-   PUKAR team will present their research study from Gazdharbandh area for the meeting.
-   The consortium will meet on February 4, 2014 for a mock of the presentations to be presented.

Infrastructure for the Internet pilot in Mumbai

-   Amitabh Singal and Abhay Karandikar will work together to build internet network maps for Girangaon, Gazdharbandh and Dharavi. Maps from one area of the study will be presented at the MCGM meeting.
-   The map will track the inefficiencies in the system with respect to road digging by the BMC, multiple fibre lines, affability in services provided by internet service providers etc.

- Ravina Aggarwal suggested that the maps can be layered to show existing internet infrastructures and pre-planned organized fibre lines and connectivity designed by Amitabh Singal and Abhay Karandikar.

Role of Majlis- Media and campaign partner

- Ravina Aggarwal spoke about Majlis and its role in building effective media campaigns to help get the internet advocacy to the public.
- It was decided by the consortium that UDRI will help Majlis indentify different segments that the campaign needs to address, so that different campaigns can be effectively designed.
- Majlis will the accordingly plan the media strategy for dissemination.
- It was decided by the consortium some main focus areas of the campaign will be public voicing their opinion, internet access and Citizenship in Mumbai.
- Majlis will also take photographs and video for the current inefficiencies in the existing internet systems for the campaign.
- Madhushree Dutta also suggested that they will organize a meeting of journalists in Mumbai around May to introduce the study and start off the campaign.
- Majlis will also discuss responses with the consortium if there are any particular articles in the Media about the internet infrastructure and the study.

The meeting was followed by lunch.

5th February 2014

Meeting Minutes for Digital Inclusion workshop coordinated by IIT Mumbai

Venue: F/South Ward office, Conference Hall,
Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg, Parel, Mumbai 400012

Attendees:

Name	Organization
R. Balachandran	Nodal Town Planning Officer, MCGM
Dinesh Naik	Assistant Engineer, DP, MCGM
Abhay Karandikar	Professor and Head, Department of Electrical Engineering IIT-Bombay
Pankaj Joshi	Executive Director, UDRI
Dr. Anita Patil-Deshmukh	Executive Director , Pukar
Siddharth Pandit	UDRI
Omkar Gupta	UDRI

Kaiwan Elavia+ 2	UDRI
Shrutika Shitole	Pukar
Sadhana Guldagad	
Shikha Pandey	Majlis
Krithi Ramanathan	IIT Bombay
Sudhir Badami	
Gurujeet Singh	Student Journalism
Veena Takle	SCE
Ar. Y.R.Pathak	G.D.S. & Co.
Vasant patil	Indivisual
Shruti Menon	Narotam Sekhseria Foundation
Ar. Rahul Mayekar	MCGM
Sukhatme Shirish	PEATA (PRESIDENT)
V.S.Sahare	MCGM
A.D.Kshirsagar	MCGM
Irene N	Sir J.J. College of Architecture
Sitaram Shelar	YUVA
Unmesh Chaphekar	MTSU
Sanjay M.	BMC
Tejal Shitole	Pukar
Kiran Sawant	Pukar
Anagha Kamat + 1	Journalism Mentor
Sanjay Kadam +2	Pukar
Afrel	Majlis
Arnob Jon	IITB
Pruja Warekar	CAT

Sabu Francis	
Ashwini Thakar	Bombay First
Nagendra G. Mirajkar	Dy Mumbai Port
Sushil Shinde	Tarai Foundation Trust
Ravina Aggarwal	Individual
A.V. Shenoy	MVS
Alok Thakor	Citizen
Mahesh V. Bafna	Citizen
Munjal Savla	Citizen
Vibha Kaushal	Citizen
Prakash Angane	Janata Jagruti Munch
Meera Malegaonkar	BDH
Manoj Jeikar	MCGM

Minutes:

1. Mr.Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay) opened the session stating the intent of the workshop, goal for Digital Inclusion with Universal access to Broadband, Information and communication Infrastructure, in Mumbai Development Plan, 2014-34.

2. Executive Director (ED), UDRI during his presentation stated the following:

    r. Gaps exist in the optimum and existing levels of landuses in revision of Mumbai Development Plan (2014-34)

    s. Future urban paradigms are equitable and inclusive development with knowledge economies, collaboration, responsive governance, efficiency, crowdsourcing. These demands for digital inclusion in information and communication infrastructure with focus on broadband penetration in slums/low income households in city.

    t. Section 22(d) – Maharashtra Regional and Town Planning Act 1966. Mentions the extension and development of Transport and Communication Infrastructure.

    u. During Development Plan of 1981-2001, MCGM has introduced and implemented telephone exchange / service centres. These interventions made a remarkable increase in telephone penetration in households in the following 20 years.

    v. Similarly Development Plan for 2014-34 will need to have digital and broadband infrastructure. Because,

- Universal access to knowledge, essential services and health facilities using internet technologies will lead to better quality of life.
- Higher productivity for economic development.
- Critical response in disaster management.
- Efficiency in government data sharing and integration of resources.
- Increased public participation.

w. Applications to Mumbai will be in various aspects like, education, health, disaster management, transportation, livelihood, governance, etc.

x. Elaborated these aspects stating its shortfalls and opportunities along with similar case studies.

y. MCGM will have to take an active role in
- Creating a citywide middle mile infrastructure of optical fiber that would be enable access to internet
- Making available of public and civic data publicly accessible on internet and multilingual

z. Suggested consolidated planning principles derived through various stakeholder's meetings
- NECESSITY & DEMAND: Slums, low income households, 5 year implementation time frame, Universal access to broadband - Citizen's Right
- IMPLEMENTATION GOALS: Municipal schools, libraries, fire stations, parks, transportation facilities, sewage treatment plants, 24*7 connectivity, Disaster Management, Private, municipal and public access points to broadband infrastructure.
- ROLE OF MCGM: MCGM- Owner of Municipal Broadband, Right of Way Issues, MCGM – Online citizen services and Municipal Data, MCGM- Planning and Monitoring, Public – Private Partnerships
- INFRASTRUCTURE: Scalable, Middle Mile – Citywide Optical Fiber, Technology Adaptable, 20 year usable timeframe.
- OPEN PUBLIC DATA: Education, Healthcare, Transportation and Governance, All MCGM Data and services online, Efficiency, reduced wastage and corruption, improve internal working of MCGM.

aa. Suggested approximate citywide landuse requirement:
- Fiber optic service network that connects fiber to the curb (FTTC).
- Mobile Switching Centers: 500 sq.m for every 3 wards = 4000 sq.m city wide
- Network Operations Center: 3000 sq.m

bb. Suggested Development Control Regulations:
- New development/redevelopment proposals to incorporate optic fiber network
- Public access points for broadband network in informal settlements & urban villages
- Broadband connectivity and municipal wi-fi in Public spaces.
- Fiber optic connectivity to all municipal services and ward offices.

cc. Planning for future demands of broadband in advance Ad-hoc development can be avoided.

3. Dr. Anita Patil- Deshmukh, Executive Director - PUKAR, presented following findings of the study focusing on access to internet in low income communities of city. (Case of Gazdhar Bandh, H-West Ward, population of 50,000 and area of 2.5 Sq. Km).

dd. PUKAR's role essentially was to bring to sharp focus the digital divide that exists in the poor income neighborhoods and the aspiration and needs of the marginalized people in relation to internet access

ee. Various services are available on internet but urban poor can not avail them due to lack of internet access which ultimately is leading to discrimination in society.

ff. 65% of households in city are in low income group.

gg. Findings of survey conducted within 459 households and 1377 individuals in selected area:

- 85% people do not have internet at home

- Most people earned between Rs.1000-15000 and are willing to spend between Rs 100-800 per month on internet. Average spending is Rs. 576 on internet.

- While some of the critical services like admissions, results, applications for jobs and various identity cards are available on internet most poor people do not have an easy and affordable access to internet.

- While 78 % people in this slum have heard about internet, 58% of those could not use it. 95% users belonged to age group of 14-30 years and as is the case with rest of domains, the gender divide continues within the digital divide as well with only 26 % female using internet while 74 % male usage.

- Young male population is the major user of internet in the form of 2G network on mobile, which do not allow them to access to e-services provided by MCGM.

- Most of the time the youth used internet for downloading either for entertainment or for school related projects (479 out 584 respondent) and social networking (477 out of 584). Very few could use it for any services (120 out of 584).

- When asked why they do not use mobile for other things, three reasons came through. First was related to speed. Most mobile phones with a package provide 2G services, which do not allow them to use it for anything else due to very slow speed. The 3 G mobile packs are unaffordable to majority of the youth. So they all end up using other avenues for Internet access. Those were cybercafé (163 / 584) schools or colleges (142/584), offices (109/ 584)). Those who could not access these services at schools or offices also could not access them at cybercafés.

- People cannot use Internet as only 2 cyber cafes are in the locality outside 1.5km radius, inaccessible and unsafe to female users.

- 95% people think that MCGM has a role in providing affordable internet.

- 87% people are willing to use internet provided in community areas and willing to pay for it.

- Majority of them wanted it is a form of kiosk and they wanted it in an open space.

- Dr. Patil-Deshmukh shared the information about all the services that are currently available on the internet and emphasized the fact that while some of the critical services like admissions, results, applications for jobs and various identity cards are available on internet most poor people do not have an easy and affordable access to internet.

hh. Recommendations for DP

- Making Universal and Affordable Broadband Internet as an Obligatory responsibility of MCGM

- Allocating space in the DP for building such networks in all communities especially low income households of Mumbai.

4. Mr. Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay), presented technical aspects of implementing universal broadband within the city.

- The presentation focused on

  0. Broadband Network

  1. Current scene in Mumbai

  2. Role of MCGM in DP related to internet

  3. Case Studies

  4. Planning

- Currently, there are 15 million broadband connections in the country. He mentioned that TRAI's roadmap predicts 600 Million broadband connections in the country by 2020. In general, averages in Metro like Mumbai are expected to be higher than national average. Thus, he emphasized that by 2030, Mumbai should aim for universal broadband access for every household. By 2030, a city wide network is expected to connect all residential and commercial establishments, public wifi-spots and public safety and disaster management network including 24 hour video surveillance.
- If broadband speed of 2 Mbps as outlined in National Telecom Policy 2012 (which admittedly is a conservative estimate for 2030) was assumed, Prof Karandikar illustrated that universal access would require a whopping capacity of 50 Gbps/sq km in many areas of Mumbai with high population density even with such conservative estimates. He illustrated that this cannot be achieved with current cellular deployment of macro cells. The future evolution of wireless system is likely to be in the form of micro, pico and femto cells (collectively called small cells) which would be low power nodes with high spectral efficiency.
- He outlined the vision of providing fiber to the curb and Small Cell deployment of wireless nodes for meeting the high capacity requirements of broadband to every household in Mumbai.
- He informed that from DP perspective, MCGM has the following points of intervention-
  - 0. Right of Way for Fiber
  - 1. Creating Middle-Mile Network
  - 2. Zoning and Land use for Tower and Switching Infrastructure
  - 3. Building code for enabling broadband.

- He further elaborated that MCGM should create the concept of Telecom Corridors, lay conduits and tranches, build middle mile network and rent/lease the corridor to the service providers.

- Further, MCGM should mandate builders to provide ducts for optical fiber during construction itself. This would also enable In-Building solution. MCGM should also map all underground utilities including fiber ducts and should make it available for all service providers.
- In order to provide universal access for citizen services, MCGM should plan for providing free public hotspots, community kiosks and centers in designated locations. Mumbai DP should aim to provide broadband for citizen services in underserved locations and areas of the city as one of the most important charters.
- Mumbai DP should plan for Municipal broadband network. The municipal broadband networks can be overlaid over the same telecom corridor as outlined above. It should provide high speed connectivity to all municipal schools, hospitals and ward-offices. It can also act as the backbone for public safety and disaster management including Fire Brigade, Police and Ambulances.
- He also emphasized that municipal interventions for universal access have been carried out in several cities of the world. He presented two case studies of Stockholm and Oregon.
- Finally, he illustrated by taking example of Mumbai H /East ward that it is indeed possible to conceptualize Telecom Corridor which can also be used for Municipal broadband network. Further details of implementations can be worked out with detailed studies. However, he submitted that Mumbai DP for 2030 should outline the vision for Broadband for All.

5. Mr. Krithi Ramamritham, Head of Centre for Urban Science and Engineering, Presented challenges in bridging the information gap through digital inclusion, The highlights of the presentation are as follows:

- Connectivity divide- as there is no connectivity or low band width
- Content Divide- no relevant content, not accessible, not updated, language barriers.
- Interfaces are not user friendly.
- Main challenges are type of information to be provided, sources of information, process of getting information, department involved, time and fees required.
- Listed and categorized citizen services into one time information, continuous, paid, free etc.
- Suggested citizens mobile applications based on crowdsourcing.
- Four components of information Location, Visuals, Annotations, Category of problems.
- Suggested integrated approach through Planning and Design, Policy and Governance, Infrastructure, Informatics for better quality of life.
- He shared a few ideas related to technology based innovation like Mumbai Navigator that shows maps of the city with various bus and train routes and makes communing much easier. He suggested that technology needs to innovate and make the quality of life better for the citizens.

6. Mr. Aloke Thakur, academician, journalist and citizen, quoted Section 22(e) –chapter-3 from Maharashtra Regional and Town Planning Act 1966, to explaining the possibilities to incorporate internet in future Development Plan. This clearly mentions the right to common man for public utility.

- The Act defines amenities and public utilities as public necessities, provision of internet infrastructure can be justified as this is the future necessity of every citizen
- Currently the Internet facilities are seen as need of certain class of people, but Internet facilities provided by MCGM will make such it public services and can be reached to larger population.
- Suggested provision of such Public utilities in Landuse Planning is the basic requirement.
- Suggested to provide dark fiber to every household in similar way MCGM has provided water supply, sewerage lines and other infrastructure
- Requested MCGM to have foresight and visionary attitude for Development Plan by clearly defining amenities responding to future necessities on people.

7. Mr. A.V. Shenoy, Mumbai Vikas Samiti, suggested providing facilities of higher standards keeping the vision for 2030.
   - MCGM should restrict its role in data maintenance and provision of basic network by providing primary and secondary server in respective wards and use existing laid network by privet companies to reach up to every household.
   - Stated hazards on health due radiation of Wi-Fi and mobile network should be considered while planning, Micro Cell technology is ideal solution.

8. Prof. Abhay Karandikar stated that principle concept of having right of way for broadband network is the priority, the implementation issues and strategies can be worked out in order to achieve standards.
   - Mentions the low power Wi-Fi network is low on radiation hazards and economic.
   - Stated that the new buildings should have a Code/ DCR to have optical fiber network and policies can be worked out to provide network in existing buildings
   - Providing Internet connectivity without the intervention of MCGM will not be citywide approach.

9. Mrs. Mira Mategaokar, citizen, stated that Development Plan should map the location of towers, and should give guideline in order to regulate radiation hazardless Broadband network. National level housing schemes should also include the provision of Broadband network in community.

10. Mr. Chaitanya Mehta, citizen, mentions opportunities and importance of technology and broadband in encouraging entrepreneurship in city which helps in economic development and contributes in GDP growth.

11. Sabu Francies, Architect & Software developer, suggests having a policy for crowdsourcing to implement the city wide broadband network. This will enable to connect the city without big efforts by single implementing authority. And to have incentives to individuals for contributing to City wide network.

12. Executive Director (ED), UDRI states that formal city can contribute in crowdsourcing but the informal city cannot be crowd-sourced for such infrastructure leading to exclusion.

- Vision document requires to promising for Digital infrastructure when it mentions to have a global inclusive city by 2034.
- Right of way for Broadband network has to be mention in Development plan.
- All Municipal services to be connected via Internet.

13. Director of Public Forum, UDRI stated that basic Digital infrastructure should be provided by MCGM in similar way that basic water supply lines are provided by MCGM.

14. Mr. Sudhir Badami, Activists & citizen, mentions the importance of online services like ticket booking which has a remarkable economic value in saving time of travel, saving working hours in commuting at the location of service.
    - Also mentions the importance demarcating digital infrastructure on DP, in similar way MCGM has shown the future metro and monorail line.

15. Nodal Town Planning Officer, MCGM, stated to accept this new concept of Digital infrastructure, this will come under utility like many other utilities provided by MCGM,
    - There is no hindrance in implementing broadband infrastructure without including it in Development Plan, as road network is demarcated in DP, Broadband network can be laid below them, as there is no particular norm which prevents to have internet network below roads.
    - MCGM has a separate information technology department; they can manage the policies regarding the broadband networks in city.
    - DP-MCGM will make policy recommendations for including broadband and digital inclusion in Development Plan.
    - MCGM will consider the digital policy and zoning in terms of location of these facilities in Development Plan.
    - Network organization centres should be planned by separate agency in respective ward, it may not fall in Development plans Scope. In case it needs to integrate with Development Plan, MCGM will need to have inputs from separate agency showing, mapping the locations for such infrastructure. In previous years MTNL had suggested MCGM the desired locations of Telephone exchange in DP.
    - Development plan can provide Building Code to facilitate Broadband Infrastructure.
    - MCGM will include such digital infrastructure requirements in Development Plan report.

16. Engineer DP, MCGM, mentioned that detailed inputs from concern department have to come to development plan department regarding Digital Infrastructure.
    - Since the plan is for 20 years the landuse will demand for changes so Development plan cannot have inflexible policy and demarcated infrastructure.
    - Agreed to give enabling provisions for broadband infrastructure in development Plan.

17. Meeting conclude at 18.20 Hrs.

Planning principles and suggestions for Information & Communication Infrastructure in revised Mumbai Development Plan (2014-34)

Letters sent by UDRI & Stakeholder group to Municipal Corporation of Greater Mumbai (MCGM)

19th July 2013

Letter signed by Stakeholder group sent to Municipal Commissioner, MCGM to share developed set of planning principles to guide the **'Digital Vision'** for the city. The suggestion and recommendations are made by 'Stakeholder' Groups consisting of Researchers, former Government and local body officers, NGOs and experts like Abhay Karandikar (IIT Mumbai), Charles Correa, Shirsh Patel, Amita Bhide (TISS), D.M .Sukhtankar, Nishit Kumar (ChildLine India) , Makarand Narwekar, Madhushree Dutta (Majlis) and many more.
(These principles discussed in greater detail in Annexure I)

19th March 2014

Letter sent to Chief Engineer Development Plan, MCGM to share key strategies and recommendations for Digital Inclusion and Broadband Infrastructure in revision of Mumbai Development Plan (2014-34)
(Recommendations discussed in greater detail in Annexure)

Workshops attended for Information & Communication Infrastructure

Workshops attended by Siddharth Pandit, Director, UDRI organised by Centre for Internet & Society in Bangalore to engage in innovative exploration of open and interactive technologies.

Workshops attended by Omkar Gupta, Director, UDRI organised by Centre for Internet & Society in Pune to engage in exploration of open and interactive technologies.

Impact

- UDRI's main advocacy thrust this year was focused on integrating the need for information and communication infrastructure with emphasis on broadband as a key focus area is the Mumbai city's next Development Plan (2014-34).

- Integral to this advocacy and to UDRI's adopted methodology for bottom-up planning processes are the stakeholder principles for Information and Communication Infrastructure that were communicated to Mumbai's planning authority (Municipal Corporation of Greater Mumbai or MCGM), the Chief Minister of Maharastra and the Mayor of Mumbai.

- These principles were formulated after stakeholder meetings about the need for extending Information and Communication Infrastructure especially to the poor. The need for inclusion is reflected in the principles listed in Annexure 1. Principle 1 and 2 talk about the need to connect the infrastructure across poor households and municipal facilities which are primarily used by lower income and slum households. Principles 3 and 5 talk about the role of municipal agencies to bear the cost of middle mile infrastructure thereby distributing the costs over the entire city rather than leaving it to private sector, in the principle of equity. Principles 4 and 6 talk about the role of private sector in extending the last mile connectivity and programs shaped to the users. Finally principle 7 talks about MCGM adopting key program areas to disseminate information regarding Education and Health using this infrastructure.

- These principles were endorsed by former Municipal Commissioners of Mumbai, renowned urban planners like Charles Correa, IIT Mumbai experts, local elected representatives, educational institutions like JJ School of Architecture and Tata Institute of Social Sciences and many other NGO's working in areas of education, health environment, culture, livelihoods, women's safety etc.

- The Development Plan (DP) department in MCGM acknowledged that these principles needed attention in the current revision of the Development Plan (2014-34) and promised to include them in any land-use provisions for Mumbai.

- A participatory GIS platform, under the grant from Ford Foundation, is being developed with an aim to crowd source and shape urban planning and urban policy in Mumbai. This platform will assist

local communities to report deficiencies within their neighborhoods, voice demands for basic needs for themselves in the development planning and collaborate with government to formulate the implementation and monitoring. (Kindly refer to the GIS section for more information)

- The print media has acknowledged the need for wifi and broadband infrastructure in the same week that the stakeholder principles were communicated to the MCGM. These news articles were carried upon in Times of India dated July 20, 2013 and July 21, 2013 and Hindustan Times dated July 20, 2013.
- The Marathi television news channel IBN Lokmat carried an interview in June with Dr. Ajit Ranade, chief economist of the Aditya Birla group. The interview discussed public participation and the role of broadband infrastructure in increasing access for the poor to e-services. The transcribed clip is uploaded to http://www.youtube.com/watch?v=dKQVE1Wz5h0

The specific subtasks were held through a consultative process. The list of meetings with the attendees is shown below

Date and Venue	Subject of Meeting	Attendees	Important Outcomes
4th June 2013, UDRI	Media Survey and broadband planning	IIT Mumbai, UDRI, PUKAR, MAJLIS, PRAJA, Childline India	1st Draft of planning principles formulated. Understanding of media access in slums in Mumbai
18th June 2013, UDRI	Public Consultation Meeting	UDRI, IIT Mumbai, Indian Red Cross, BEAG, Hindustan Times, BUILD, MAJLIS, CRIT, KRVIA, G5A Foundation	Public comments on planning principles sought. Public information and advocacy launched
13th July 2013, UDRI	GIS Database for Mumbai	BIOND, PRAJA, Shirish Patel Associates, Aditya Birla Management, UDRI	GIS data needs for urban planning and problem reporting in Mumbai
19th July 2013	Planning principles for Broadband finalized and sent to CM-Maharastra, MC-MCGM and Chief Engineer- DP		
25th July 2013	Planning principles for Broadband finalized and sent to Mayor-Mumbai		
3rd September 2013, UDRI	Stakeholder roles discussion	IIT Mumbai, UDRI, Ford Foundation, MAJLIS, PUKAR,	Tasks for research, advocacy, survey and public campaign

		Journalism.org.in, NIXI, Telxess Consulting	finalized
25th October 2013, IIT	Tasks Review	IIT Mumbai, UDRI, PUKAR, MAJLIS, Telxess Consulting	Draft Surveys for internet penetration and slum areas identified
27th December 2013, PUKAR	Tasks Review	IIT Mumbai, UDRI, Ford Foundation, PUKAR, MAJLIS, Telxess Consulting	Draft Survey circulated and finalized, areas for survey finalized.
5th February 2014	DP workshop for ICI	IIT Mumbai, UDRI, PUKAR, MAJLIS and over 50 other attendees	ICI acknowledged as key investment for Mumbai in the DP.

3.0   Preparatory Study Analysis:

DG to write intro

After conducting a preliminary analysis of the Preparatory Study Report we wish to draw your attention to the issues mentioned below:

- Growth scenarios focus only on the population numbers. No attention has been given to issues of labour, economic competitiveness, social and developmental aspirations of the people. This will lead to over simplification of planning strategies as already evident in over reliance on FSI and redevelopment as key to city's development. **Development plan for Mumbai has to be much more than a simple demographic exercise. These acknowledgements to social and developmental gaps and aspirations are completely missing in the current document.**
The Development plan process should include all the people affected by the revision process. Creating islands of jurisdictions in the city may be so but incorporating them in the revision exercise is important.
Growth scenarios for all the various parameters for the city have to be prepared rather than a consolidated single scenario. Please refer to our letter dated 19th December 2011 on the planning principles for the revision of the development plan for Mumbai, which has been endorsed by more than hundred organisations and individuals, can serve as base document for deliberating on appropriate planning principles for revision of Mumbai's Development Plan.

- While the Preparatory Studies Report does attempt to build population forecast using planning methods, no such methodology is been demonstrated for economic forecast. It has been well documented that Mumbai has lost most of its manufacturing industries and mill lands to other cities in India and other countries. The fallout of this loss of employment has forced majority of the citizens into the informal job sector, predominantly street vending. It would have been a good exercise to estimate which sectors does the city aspire to invest in and what strategies would it pursue to enable its workforce be competent for its future economy. Instead the Preparatory Studies Report has loosely identified 5-6 industrial clusters from a previous transportation report. The DP dept. and Groupe SCE are culpable in having failed to recognise and account for the complexity of livelihood opportunities in Mumbai by repetitively avowing their intent to make Mumbai as a global financial, commercial and real estate centre of the world. They are committing the informal workers, the 'naka' workers, the mill workers, the rag pickers and millions of other Mumbaikars to a city that holds no hope for them, despite the fact that majority of the city operates in the informal sector and the employment in this sector is growing faster than the formal sector. There is no mention of any strategic plans for investments in health, education and livelihood job training programs that can accelerate the human development of this population.

  The lack of awareness and responsibility has sadly existed for the last 20-30 years and as evident in the 'Preparatory Studies Report' threatens to continue over the next 20 years.

  With an increase in the informal employment sector employment clear guidelines have to be mentioned as to how to provide for them and assimilate them into the Development Plan process.

  Kindly refer to our letter dated 4th October 2011 on Livelihoods for further strategies to be incorporated in the Preparatory Study, Further Tasks related to the DP revision process and the Proposed Land Use plan.

- The one thing that the DP does get right is promising riches for the real estate lobby by not tying provision of amenities to FSI and absolving FSI of any correlation with density and quality of life. The DP team is wishing away detailed and insightful work of Charles Correa and Shirish Patel who have time and again proven to the contrary. A city-wide debate on fixing the upper limit on space demand for amenities (46.65 sq km for 2034) has to be

initiated given these differing views of the FSI and public amenities. **Higher FSI without sufficient public amenities leads to higher density and lower quality of life. The DP department cannot absolve itself from the responsibility thereof using superficial correlation.**

There is a direct co-relation between FSI and amenity provision and Quality of Life; one cannot increase only one of the parameter without the other. Open spaces on Podiums are a farcical solution and should be abolished completely. All amenity space should be clearly identified with its permitted uses and not clubbed so as to inflate the amenity provision figure.

Kindly refer to our letter dated 26th July 2011 on Housing for further strategies to be incorporated in the Preparatory Study, Further Tasks related to the DP revision process and the Proposed Land Use plan.

- The one thing that is disappointing for the citizens of Mumbai is the vision that has been put forward for Mumbai in the DP. This vision is

"To enable the transformation of Greater Mumbai into a Global City that is Inclusive, Sustainable, Liveable, Efficient and Competitive."

Ironically this ambition for a global city comes with the lack of will to obtain global standards for open spaces, educational amenities, health amenities, public transportation, etc. The MCGM has admitted its failure in providing the minimum required level of services in sanitation (only 50% of household waste is collected door to door), water supply (38% of water usage is unaccounted) and open spaces (recreation/open space standards have been set at 2 sq. m/capita compared to 10-12 sq. m/ capita as set by national UDPFI standards). Similarly the Preparatory Studies Report has prescribed lowering of standards in health and education. Curiously the one standard that does not get lowered and is pleaded for repeatedly is the continuous increase in FSI. Tying 'non-restrictive regulatory FSI policy', 'flexible land-use zoning', 'minimizing transaction time for DCRs', 'land pooling for common good' and 'redevelopment' to Mumbai's development hint at unregulated real estate construction.

The unregulated construction in the city happens at the cost of amenities to its citizens. To be a global city, the lowering of standards is unacceptable and is a self-defeatist first step in a 20 year planning exercise. The Preparatory Studies Report also remains silent on earlier DP implementation with no reference to earlier reservations. Thereby dual damage is caused; one, the city has no reference to what has been achieved already and second, learnings from the previous planning exercise such as best practices are lost.

Lowering the standards for amenity provision in the city is a dangerous choice as this will no doubt lead to reduction in the quality of life in the city. Since this DP will be in force for next 20 years it is also should reflect the aspirations of the city to commit to national & international standards.

We urge you to maintain the Open Space standards as per the UDPFI Guidelines, the Health standards as per the NUHM Guidelines and the Education Standards as per the RTE Act 2010 Guidelines.

We request you the devise creative and unique strategies to achieve such standards and not change the rules of the game all together by diluting the standards.

Please refer to our letters on Health (vide letter Dated 14th Sept 2011)/Education (Vide Letter Dated 19th Sept 2011)/Water and Sanitation (vide Letter Dated 12th September 2011) /Urban Form (Vide Letter Dated, 2nd Nov 2011) /Environment (vide letter Dated 9th Sept 2011) etc. attached to this letter for further strategies to be incorporated in the Preparatory Study, Further Tasks related to the DP revision process and the Proposed Land Use plan.

- The human development report 2009, published by MCGM, lists the slum population as 6.5 million while the 'preparatory studies report' lists the total slum population for greater Mumbai at a provisional 5.2 million. The report does not explain or account for this huge disappearance of 1.3 million slum population.

  Approximately 20% of slum population or 10% of the city's population has disappeared overnight. Mapping the slums in the ELU would have helped to reconcile this discrepancy. Unfortunately the DP exercise has excluded slum mapping despite the constitution providing the 'Right to Life'. The responsibility for the provision of the above services, by the Municipalities, in order to promote a healthy life for all its citizens is also enshrined in the Constitution of India. Article 21 of the constitution of India states that 'no person shall

be deprived of his life except according to procedure established by law.' Right to life as enshrined in article 21 means something more than survival or animal existence. It includes the right to live with human dignity.

Slums in Mumbai are much more than just housing slums. Their contribution to Mumbai is plentiful in terms of recycling, retailing, wholesaling, manufacturing, consumer services, industries, and several informal services and enterprises. Their contribution to economy and employment is indispensable.

It is imperative to ensure that the development planning process address the issues faced by the residents of Slums and SPA's otherwise the planning process is a futile exercise in wishing away the realities faced by the majority of the residents of the City.

Kindly refer to our letter dated 26th July 2011 on Housing, 4th October 2011 letter on Livelihoods and letter dated 25th February 2011 on inclusion of slums in planning area for further strategies to be incorporated in the Preparatory Study, Further Tasks related to the DP revision process and the Proposed Land Use plan.

- A network of 250 stakeholders all over the city worked diligently for a period of more than 2 years building a framework for citizen participation in the planning process. Regular meeting were held over these 2 years with the Municipal Commissioner, MCGM DP dept., the MCGM Standing Committee and the MCGM Improvement Committee. (Kindly refer the attached the Minutes of the Meeting held with the Municipal Commissioner on 16th October 2012, followed by two meetings with the Standing Committee Chairman of the MCGM dated 17th January 2013 and 24th May 2013 respectively) The Preparatory Studies Report pays a token lip service to 'bottom up' public participation, leave alone acknowledging and integrating the periodic suggestions and objections submitted by these organisations. Meanwhile the report is full of over simplification (such as in labour), arbitrary benchmarking (such as 46.65 sq.km spatial requirement for amenities and Rs. 60,000 mentioned as cut-off for 9% of household income) and unexplained methods of analysis (such as radar diagrams, decennial representation of housing).

True public participation involves building capacities within local civil society through information gathering, dissemination of technical know-how and negotiation amongst

various stakeholders and their aspirations. Unfortunately the DP department has carried out the planning exercise in a bubble and the 'Preparatory Studies Report' attests to that.

The true test of democracy is when people can make an informed decision. Hence the methodologies for all the various analysis have to be clearly mentioned in the preparatory study. Transparency will build trust amongst stakeholders. We urge you to involve the people at various stages of the revision of the development plan.

There is an urgent need to make all the documents produced for the revision of the Development Plan available in the Local Language "Marathi" and "Hindi" as promised in the meeting with the MCGM Standing Committee Chairman dated 17th January 2013 (letter attached).

- The DP dept. has time and again chosen to renege on commitments made during the various meetings with the civil society. This is reinforced again in the Preparatory Studies Report by omission of critical issues of digital inclusion, SPAs and slum mapping, Chitale Committee recommendations for disaster management, gender sensitivity, etc.

  A development planning exercise is a commitment by a local authority to its citizens to be sensitive to their aspirations, formulate the strategies to achieve specific goals, commit budgets and resources towards the implementation and involve the citizens in the monitoring and the evaluation. The current 'Preparatory Studies Report' does not strive to achieve any of these minimum planning standards.

  Kindly refer to the letter dated 7th May 2010 from the Municipal Commissioners office endorsing the consultations with the stakeholders in the planning process at various stages.

- As compared to the other cities in the world, Mumbai lags far behind in strategic investments in broadband and communication infrastructure. The national level broadband and universal access policies have not translated to MCGM's commitment towards a city wide fibre optic network. Such a network integrated with other utilities will result in making Mumbai highly competitive and efficient in harnessing smart city technologies in the areas of transportation, governance, education and health etc. The current mode of operation where private telecom players are allowed to construct their own networks has destroyed the visual appeal of the city (as evident from wires hanging from one building to the other).

A city commitment to building this middle mile network that connects at least all the municipal facilities like schools, hospitals, Aanganwadis and libraries will bridge the digital divide so prevalent in the city. The 'Preparatory Studies Report' completely ignores this vital piece of infrastructure and economic development strategy for the next 20 years.

The MCGM has to incorporate, within the DP, a digital vision for Mumbai that spans across infrastructure, policy and services and plan accordingly to connect all low income households within the first five years of the DP implementation.

Mumbai should be the first city to be digitally inclusive city. This should be the part of the Vision if we are to be competitive with the National and International economies. Kindly refer to the letter dated 19th July 2013 regarding the Information and Communication Infrastructure in Mumbai and the subsequent acknowledgement vide letter dated 26th August 2013 for further strategies to be incorporated in the Preparatory Study, Further Tasks related to the DP revision process and the Proposed and Use plan.

- The Preparatory Studies Report fails to layout any strategy for planning of pedestrian mobility and public spaces. These are predominantly used by women, children, economically marginalised communities and senior citizens. As urban crimes against these sections rise in Mumbai and other cities of India, investments in pedestrian infrastructure such as good quality sidewalks and vibrant public spaces will act as key deterrents in these crimes.

MCGM should develop a pedestrian plan, integrated with the DP, for the city of Mumbai. Sadly such a plan is missing from the vision for Mumbai.

Kindly refer to our letter dated 19th December 2011 on planning principles for the Revision of the development plan for Mumbai for strategies that need to be incorporated in the Preparatory study, Further Tasks related to the DP revision process and the Proposed Land Use plan.

- The Preparatory Study Report maps parameters such as Air Quality, Water Quality, Noise Levels, Flooding, landslides etc. and have concluded to uncontrolled development and continuous reclamation of rivers and creeks has created substantial hazards for the people.

The air quality standards are breached at most of the places where sampling was done. Hence in the vision it was envisaged that the city be Ecologically Sustainable.

However with reduction in standards for open spaces and no restrictions on the development (Artificial Scarcity) we fail to see the connection. It will work for the converse. With dense development and no restriction on FSI how does the MCGM plan to have an ecologically sustainable city?

Large areas of Mangroves have been considered out of MCGM territory and hence open to exploitation.

Observations relating to ELU survey:

Other Deliverables/Meetings/Issues that are missing since the Existing Land Use Maps and Report Stage are:

- Meeting was to be held in June 2013 with the State Government (UD Secretary, CMO) SCC, Improvement Committee, DP department, MMRDA to address the technical issues faced in the inclusion of SPA areas in the Development Plan for Mumbai.

- Meeting was to be held with the local councillors in order to brief them about the DP process and take into consideration their comments and suggestions.

- Involve all Additional Municipal Commissioner (AMC/DMC) in charge of other MCGM departments such as education, health, SWD, HE, SWM, So, SP, MSDP, P&D, PPP, M&E, Road and traffic, bridges, etc. in the DP revision process.

- Prepare the ELU maps with all layers and publish separate maps if required for display of all the information available with the MCGM.

- Helpdesks to be established in each ward which will facilitate better co-ordination of suggestions and comments from concerned citizens.

- Reconciliation with the National Remote Sensing Agency Nagpur on areas of Mangroves, Salt Pan Lands and Mud Flats.

- Reconcile the area of Greater Mumbai with National Remote Sensing Agency Nagpur

- Detailed building-wise mapping exercise of the Slums and SPA areas for the ELU.

- Demarcation of Built areas on open spaces and garden.

- Heritage Structures with the related grades should be demarcated on the Existing Land Use Plan.

- Preparation of all the Maps and Reports should be published in the vernacular languages.

- Recommendations of the Chitale Committee Report to be included in the Preparatory Study and the ELU

We urge you hereby to kindly incorporate the suggested changes in the Preparatory Study Document and the Existing Land Use maps and Report.

4.0   Workshops with the MCGM officials and the Stakeholders

Minutes Of the Meeting with Shri. Rahul Shewale, Standing Committee Chairman at the MCGM on 24th May 2013 at 11.00 am.

As a follow up meeting with the MC on 16th October 2012 and the Meeting with the SCC on 17th January 2013.

Present for the Meeting:

Shri. Rahul Shewale	Standing Committee Chairman MCGM (SCC)
Shri. Ram Barot	Improvements Committee Chairman MCGM
Shri Balachandran	Deputy Chief Engineer DP MCGM DyCE(DP)
Shri Sanjay Jadhav	Executive Engineer DP MCGM
Jamsheed Kanga	Former Municipal Commissioner
Pankaj Joshi	UDRI
Shirish Patel	SPA
Cyrus Guzder	UDRI
Omkar Gupta	UDRI
Siddharth Pandit	UDRI
Shai Venkatraman	UDRI
Amit Devale	UDRI
Sitaram Shelar	YUVA
ArvindUnni	YUVA
HemaRamani	BEAG
Farida Lambe	NirmalNiketan
VidyaVaidya	H (W) Ward Federation
Lucy Dsa	H (W) Ward Federation
Cassandra Nazareth	IC Womens Welfare Association
Yvonne M. D'souza	IC Womens Welfare Association
NageshKini	Mogul Lane ACM
SudhirBadami	SUM Net
NeeraAdarkar	GKSS
A.V. Shenoy	Mumbai VikasSamiti

Nayana Kathpalia	NAGAR
Sachin Kadam	SRS
ManoharRajgum	SRS
RoustomGodinho	MGP
Rossi C. D'souza	MGP
Colman Pereira	MGP
Lenin Pereria	MGP
Rupali Gupte	KRVIA
UrmilaSalunke	AKSHARA
NitinKunal	YUVA
RavindPrabhoo	Able India
DeepalUni	Sawa
MadhumiShivkar	MacchimarKrutiSamiti
KiranKeny	MacchimarKrutiSamiti
Rajesh Iseny	Shirkoliwadaadiwasi welfare association
SurendraKharat	RashtriyaApayvikasmahasangha
HussainIndorwala	KRVIA
PatilVjwala	MMKS
Kusum K	MMKS
AshwiniKani	MMKS
SangitaKoganur	MMKS
RasniKeni	MMKS
Siddharth Ghoderao	SRM
Shweta Damle	CRH
AvinashKadam	DHS
DebarthaBaneerji	SMS
Prakash Sonawane	FORCE
NanditaKumari	BedharAdhikarAbhiyan
BirjeshArya	BedharAdhikarAbhiyan
Asad Bin Said	BUILD
Vishal Amnve	Free Press

The meeting started with the SCC thanking all of the gathered concerned organisations and concerned citizens for their presence and participation in the meeting.

- SCC asked for a review of the previous decisions taken during the meeting with him on 17th January 2013.
  a. The DyCE (DP)replied that the department was in the process of finalizing the report on the comments received from the people for corrections in the Existing Land Use maps and Reports published by the MCGM. He also informed the SCC that 4,500 comments have been received from the citizens on the ELU maps and report published by the MCGM. Of these 60% relate to the ELU and remainder relates to PLU. 250 comments are actual discrepancies, the correction of which has led to the delay of the ELU process. They still have to look at remaining 8 wards. However the DyCE (DP) assured the SCC that the final ELU will be completed by May 30th and uploaded to the MCGM website within a week from that along with the action taken report on each of the submitted comments.

b. A table of each correction with comments made by each person will be posted along with the status and our response by 30th May 2013.

a. UDRI stated that there was no clear timeline on when the next set of deliverables will be published for comments from the citizens and expressed a concern that the DP may be hurried into completion. UDRI requested that status of deliverables like workshops, broader principles which were to be discussed prior to the PLU, be determined and shared with the public, so as to bring about a constructive dialogue, which could only help to develop DP that is more responsive to citizens" needs DyCE (DP) department assured that the revised schedule for all the remaining deliverables will be uploaded by the MCGM on the Website with immediate effect or latest by next week.

b. Three additional deliverables, such as Existing Situation Analysis (ESA) Growth Scenarios and Vision for the city, will be completed by June 15th 2013. Within a week of that, they will be uploaded on the MCGM website for public scrutiny.

c. Only after June 22nd 2013 would the public consultation workshops be held. These workshops would be held through all the wards.

- The UDRI H (W) Federation and YUVA raised concerns that the current revision process does not include the Slum areas and the Special Planning Areas (SPA). UDRI added that these areas house about 70% of Mumbai's population and the DP will not be successful if we do not take such a large percentage of the population into considerations. It was informed that 70% of the population occupies only 8% of the land resources hence there is a need for detailed mapping of these areas for better delivery of services. Current level of detailing is not sufficient.

    a. The DyCE(DP) informed the SCC that this issue lies beyond the MCGMs authority and the State Government should be involved to take this forward.

    b. SCC recommended that a meeting be held in the second or third week of June withthe State Government (UD Secretary, CMO) SCC, Improvement Committee, DP Department, MMRDA to address the technical issues faced in the inclusion of SPA areas in the Development Plan for Mumbai.

    c. Shri. Jamsheed Kanga informed the SCC that the MCGM has the mandate to plan for SPA and Slum areas if the appointed planning authorities are incapable of planning. He also pointed out that plans for these areas have to be incorporated into the ELU as these areas are serviced by the MCGM.

    d. Several group representatives present also asserted that slums have to be mapped and every person should benefit and be involved in the DP process. SCC also corroborated thefact that we cannot exclude 70% of the population from the planning process.

- YUVA raised the question of public awareness of the DP revision process, and informed that the local Corporators and Councillors do not have any information about the Development Plan Revision process and need to be informed of the same. UDRI added to that saying that the MCGM also had not involved its own departments in the planning process.

    a. The DyCE(DP) informed the SCC that a Meeting with the local Councillors should be held once the ESA is published, to brief them about the DP process and take into consideration their comments and suggestions.

b. All Additional Municipal Commissioner (AMC/DMC) in charge of other MCGM Departments Such as Education, Health, SWD, HE, SWM, SO, SP, MSDP, P&D, PPP, M&E, Road and traffic, Bridges, etc. will be involved proactively in the DP revision process.

- UDRI also asked if all the information that will be published on the MCGM website, be it ELU or the ESA, would have all the layers of information? If the maps were too "heavy" then it was suggested that separate maps should be prepared to show the data is that not being incorporated in the ELU maps. Shri. Jamsheed Kanga also enquired as to what were the reasons for not publishing all the information on maps.
  a. DyCE(DP)informed the SCC that the maps will be published with all the layers and the information would be uploaded on the MCGM website.
  b. Also it was assured that the Helpdesks will be established in each Ward which will facilitate better coordination of suggestions and comments from concerned citizens.

- UDRI recommended that the broader Planning principles should be made clear before the DP is published. Hawkers and Ragpickers should be included in the planning brief.
  a. DyCE(DP)informed that these planning principles will be clearly stated in the Vision document that will be published on the MCGM website.

- The SCC and Improvements Committee Chairman agreed to hold meetings for periodic monitoring and compliance of the above points.

The meeting concluded with citizens' representatives expressing their appreciation of the constructive approach adopted by the MCGM and the SCC in particular. The Standing Committee Chairman and the Improvement Committee Chairman gave a vote of thanks to all the people present for participation.

Minutes of the Meeting with Shri. Sitaram Kunte, MC MCGM at the F/South Ward office Parel on 29th November 2013 at 10.00 am.

Present for the Meeting:

Name of the Organisation
MC - MCGM
DP Department
MCGM Advisors
Groupe SCE
UDRI
YUVA
Mumbai Vikas Samiti
PEATA
Citispace
NAGAR
Name of the Organisation
CRH

TISS
KRVIA
AKSHARA
IIA
JJ COA
IIT Mumbai
Geography Department Mumbai
Machi Mar Samiti
EMBARQUE
AGNI

The Chief Engineer DP welcomed all the guests for the panel discussion and explained the sequence of events for the day

The Municipal Commissioner welcomed all the guests and asked the Consultant to start with the presentation.

Groupe SCE representative introduced the team and started the voice over presentation which lasted for over one hour.

The floor was opened for discussions on the Preparatory Study.

Many points came up during the discussion that went on for over two hours. Below are the key issues discussed.

- The Vision for the city needs to be tweaked to suite the aspirations of the people in the city. Many felt that the Competitiveness and the equitable, inclusive aspects of the vision are mutually exclusive. However any livable city would automatically be a competitive city was the general tone of the discussion. Transit Oriented Development (TOD) is a method used to bring in mixing of land uses however the need to force a TOD on an existing dense mixed use urban fabric seems to be a moot point.
- Inclusion of the Slums and the SPA areas into the planning scheme and create comprehensive housing stock for the city so as to avoid piece meal approach. All slum areas to be fixed for affordable housing schemes. Using Market forces for the provision of affordable housing is not the solution that would be sustainable. The stakeholders feared that private developers are interested only in luxury homes, whose stock in the city is already in excess, and therefore not build smaller affordable housing units that are urgently needed in the city.
  The Municipal Commissioner informed the audience that the MCGM had planned for the meetings with the Urban Development Secretary and the Other SPA authorities for coordinated Development Planning.
- The methodology of many of the analysis conducted by the consultants was brought into questions where time taken to reach an amenity was more the factor than the distance for it. Data for the analysis that the Contractor has used is

The Municipal Commissioner informed the audience that the Data that was used for the calculation was census 2011 data and the slum figures were Census figures.

- There was a serious concern among the attendees that the flexibility given to FSI regimes would densify the already clogged city. The rational that there is not enough space in the city was also challenged by many NGO representatives who demanded that clear strategies be devised for areas such as the Salt Pan lands and the NDZ. Impact of higher FSI in the City needs to be analysed carefully before recommending higher FSI. Higher FSI will also have tremendous impact on parking in the city.

  The Municipal Commissioner informed the august audience that the figures were not set in stone and are flexible as per the comments and suggestions that the MCGM will receive form the Public Participation meetings.

- Transportation infrastructure strategies do not reflect the needs of the city's pedestrian population and have envisaged only big ticket development projects. Experts for transportation sector cautioned that Road based networks are not considered as TOD and hence are not congruous with the declared Vision for the city. Women users of transportation and other amenities have been completely ignored in the study.

- Clear strategies for Heritage conservation need to be developed in the future Development Control Regulations so that the spirit of the city is maintained.

  The Municipal Commissioner informed the stakeholders; a meeting was to be held with all the Departments of the MCGM and also the Heritage Committee on the following day (30/12/2013) to involve their needs in the Development Plan.

- Conservation of open spaces and other ecological features in the city should be given top priority. Rain water harvesting, Waste segregation at source, door to door collection of garbage etc. are the programs needing immediate implementation in the city. Strategies for management of Water supply in the city have to be addressed. Intertidal zones of Mumbai need to be conserved as a first line of defence form natural calamities such as Tsunamis.

- Many raised questions about the planning Sectors that the MCGM has now divided the city into. It was generally the consensus of the people present that these sectors should be corporator wards and not another set of boundaries. Yet if necessary then all demographic information should be made available to all at the planning sector level.

- Participants expressed the need for the city to be globally competitive, should provide broadband infrastructure

  The Municipal commissioner explained to the stakeholders that a liveable, equitable and inclusive city would automatically be a competitive city and hence being competitive was more an outcome and not necessarily contradictory.

  One general observation that many had was the lack of having clear Goal followed by objectives and strategies.

The Municipal Commissioner agreed to hold a round of public participatory exercises with experts organised by the Key Stakeholders present in the following issues.

Issue	Stakeholder
Housing	TISS

Slums	YUVA
Health	UDRI
Education	UDRI
Transportation	MTSU
Environment	CAT
Solid Waste Management and Sewerage	SMS
Informality in the City	YUVA
Urban Form	UDRI
Development Control Regulations	PEATA
Water	YUVA
Gaothans/ Koliwadas/	KRVIA
Gender Issues	AKSHARA

The Municipal Commissioner also informed the stakeholders that the MCGM will conduct public meetings in all wards and discuss in detail the plans for the wards. The local planning sector should also be considered in these public meetings.

Key Resolutions: -

1. **The MCGM would attend all the Public participation workshops and the Municipal commissioner committed to attending most of these public meetings**
2. **The MCGM would make presentations on the detailed sections that were being presented in these public meetings in English and Marathi so that stakeholders would be in a better position to comment on the Preparatory Study**
3. **The MCGM would keep detailed minutes of these meetings so that they are incorporated in the Proposed Land Use and the final Development Plan.**
4. **The Minutes of these meetings would also be put up on the MCGM website in Hindi, Marathi and English.**
5. **The MCGM would actively publicize these meetings through local media.**
6. **The Municipal Commissioner asked the Stakeholders to revert with suitable dates and procedures for participation.**

The Municipal Commissioner thanked all the stakeholders for coming to the meeting and urged the stakeholders to initiate the participatory meetings with experts on key areas in the development plan.

The representative of the consultant thanked the stakeholders for their valued comments and assured them that those comments would be incorporated into the Development Plan.

Education Outreach Campaigns

SALAAM BOMBAY FOUNDATION

Salaam Bombay Foundation began a journey to educate children about the effects of tobacco use. Today Salaam Bombay Foundation has a presence in over 200 government schools in Mumbai, and over 20,000 schools across Maharashtra. They have trained and gained the support of over 35,000 government functionaries and 500 NGOs in Maharashtra.

Synchronisation

- The UDRI and Salaam Bombay Foundation in co-ordination drafted a plan for active participation of the kids in the Development Plan process.
- The generation targeted would be key users of this DP, and as a matter of fact they need to be made aware right at this stage. The awareness programs include issues related to housing, education, transportation, livelihood, environment, health, etc.
- As of now the UDRI has conducted seminars and lectures with the kids at Salaam Bombay Foundation and it has been a fruitful step. Though, mere lectures within the classroom boundaries would not serve the purpose that UDRI is looking for.
- As a further step the UDRI is looking forward to arrange for field trips for the kids to give them a better panorama (once in 3 months). This could include a bus tour around the heritage precincts, a ride in the feeder bus started by UDRI (Fort Pheri), visits to Gaothans, fishing villages, open spaces, and open them up to the positives as well as the negatives of the city. A field trip would serve and result in more efficient effects than mere seminars and sessions.
- Possible joint ventures - To be a part at Kala Ghoda festival(once a year), combined fund raising proposal, lectures by dignitaries and make such people accessible to the municipal school children so that the buffer is reduced (once in 6 months), etc.
- Identify and dedicate a day to celebrate the positives of our city, something similar to "no tobacco day", which will strengthen the children against such derailing.
- **Larger audience** - The UDRI aspires to have a larger audience for the events, so that it results in a homogenous effect and in turn produce a positive quantifiable.
- **Inclusion of teachers** - The UDRI suggests inclusion of teachers in the events, so that they can take it forward and in turn educate more kids.
- **Workshops** - The UDRI plans to organise workshops with the kids and teachers to make them aware of the Development Plan process. The children, who are in consideration now, would gradually be the key users of this Development Plan and they need to be made conscious/aware of the pros and cons of the city they will be experiencing. Also, these workshops would make the kids accessible to a wide range of dignitaries and experts. Arranging such capacity building workshops will not only generate awareness among the children but also help them look at the city sensitively.

Workshops with BMC School co-hosted with Salaam Bombay on 26th September 2013
Attended by: Siddharth Pandit, Omkar Gupta and Mayura Gadkari of UDRI
Other Attendees: Nishi Arora, Santosh Saini of Salaam Bombay, 23 students of Dr. Sarvapalli Radhakrishnan Municipal School at Andheri.
As the first of various upcoming sessions of Salaam Bombay's series of workshops with school students, focusing on each of the 10 planning areas, was held at Dr. Sarvapalli Radhakrishnan Municipal School at Andheri, with 23 students from 8th and 9th grade and interested in journalistic pursuits.

In an interactive exchange, UDRI explained to the students, the issues revolving around water supply, lack of clean water for everyone, ways to recycle and reuse water. The other topic in the discussion was sanitation which included interaction from on the availability of enough toilets for everyone in the neighbourhood and city to proper treatment of sewage to be adopted by the city.

The outcome expected is a competition of essays on water and sanitation written by the students and a final article published in the Salaam Bombay newspaper.

Workshop with BMC School co-hosted with Salaam Bombay on 04th December 2013

Attended by: Siddharth Pandit, Omkar Gupta and Anuja Vora of UDRI

Other Attendees: Nishi Arora, Santosh Saini of Salaam Bombay, 35 students of Sainath Urdu School, Ghatkopar West

In the second of Salaam Bombay's series of workshops with school students, focusing on each of the 10 planning areas, was held at **Sainath Urdu School at Ghatkopar West**, with 35 students from 8th and 9th grade and interested in journalistic pursuits.

p...   **of heritage structures and**
n...   ...ike grading of heritage
structures and precincts, UNESCO, etc. Students were made aware of the value of these monuments and their legacy to our city.

The outcome expected is a competition of essays on heritage in city written by the students and a final article published in the Salaam Bombay newspaper.

6.0 Meetings with MCGM officials

EDUCATION

Meeting Minutes for Education workshop coordinated with PRATHAM

Date: 8th of January 2014, Wednesday

Time: 15:10 to 17:15 hrs.

Venue: F/South Ward office,
Conference Hall,
Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg,
Parel, Mumbai 400012

Attendees:

Name	Organization
Dinesh S. Naik	MCGM
Suvarna C. Phudtare	MCGM
V. Sahare	MCGM
Deepali Sawle	MCGM
Surekha Pednekar (Donbosco development & Society	Donbosco development & Society
Shilpi Syad & Sumati	YUVA
Salima Surathi	
Vasudeo Shenoy	
Kanchan Thakur	
Kalpana Jadhav	
Suvarna M. Rathod	
M.S.Juvekar	MCGM
V.B. Gandhi	
Aamod Karkhanis	Novavia Educational
Santosh R. Patil	MCGM
Anagha A. Gaugan	
Sunita B. Veling	
Farida Lambay	
Pooja S. Yadav	YUVA

Name	Organization
Deepak Wadhwani	
Kaustubh Ghandhi	
Prachi Merchant	
Sandeep G. Gawade	
Vinod Hiwale	Apanalaya
Shambhavi S. Jog	
Meghu Gavande	
Rajesh Sabale	
Shruti Vaidya	TISS
Aravind Unni	YUVA
Satish Kasbe	
Linah Baliga	
Rajesh Ingle	
Anita D. Naik	
S. Raghunathan	
Sushila Shastri	
Ujjwala Chavan	
Arun Jadhav	Chip Mumbai)
Nirmal Parmar	CRY
Sunatu B. Dady	YUVA
Vrushali Naik	MMC
Rajashree Kabare	
Natasha Albuquerqut	Aseema Charitable Trust
Vinamrata Borawankar	DNA
Ganesh Shet	MCGM
Sachin Mendhe	MCGM
Vishal Lakras	MCGM

M.S.Mirchandani	LSP
Kunal Purohit	HT
Name	**Organization**
R.S. Kuknur	
H.C. Daffandar	
Usha Maherwai	
Hrydhal Daman	EGIS
Nandini Manjarekar	
Manisha Phalke	
Darshana Dubhashi	
Hussain Z. I.	
Maggie Paul	
Abhishek Chavan	
Asad Bin Saif	

Minutes

1. Chief Engineer Development Plan (ChE. DP) opened the session introducing Deputy Municipal Commissioner (DMC) Education, Director of Pratham and Director of UDRI and thanked him for his presence.

2. Executive Director (ED), UDRI thanked the ChE. DP and the Education Commissioner for arranging this dialogue with the several organisations and grass root workers working in the field of education. He stated the following

- The requirements of education for the development plan cannot be taken as a small part of the DP since integrally education is the mandatory responsibility of the municipal corporation.

- The Indian people tribunal's article states that 1million children in Mumbai are out of the formal education system. Pratham's 2004 report states that nearly 78,000 children, especially girl child drop out of schools after primary education since there are not

adequate secondary schools in the city.

- Per capita open space as per UDPFI is 3.5sqm while the Preparatory Study document states 1.37sqm. Geographically one BMC primary school per kilometre is found in the city yet this does not ensure adequacy in terms of number of classrooms or medium of education. The Development Plan 2014-2034 must ensure 100% literacy rate in Mumbai.

3.   Executive Committee Member, Pratham thanked Municipal Corporation, ChE. DP, UDRI Directors and introduced herself. She stated the following:

- 4,85,000 students study in 11,088 municipal schools from which 55,000 continue to 49 secondary schools. Several secondary schools started by BMC under PP policy so the total secondary schools not in Mumbai are 96 in total.

- Rich and the poor, both must be able to go the BMC schools. Currently 56% of the school going children got to private schools while remaining 46% goes to BMC schools.

- 90% of the aanganwadis are run in private homes as there is no space. There is no linkage between the preschool systems to the existing school system.

- Municipal Corporation runs 503 balwadis while NGOs like Pratham and Doorstep etc. run around 450 balwadis. There is a good coverage of pre-schools but the education component is weak in these. It is recommended that all municipal schools must have preschools.

- The medium of institution must be suitable to the demography of that neighbourhood. BMC has schools in 7 mediums.

- 96% of the children are enrolled and yet most of them do not attend school. Further 5th to 8th grade students drop out of schools due to poor quality of education. Quality of education will improve if School Excellence Programme are started and such programmes must be made a part of DP in terms of quality education.

- MCGM must prepare an Education Master Plan for a holistic outcome.

- Scattered population of child labourers and street children are unable to attend these schools. Thus MCGM must formulate a plan should be formulated to achieve this challenge in the Development Plan.

- The Development Plan to reserve and ensure adequate playground area near schools for children to play.

- Many BMC schools lack accessibility for physically challenged.

- The Development Plan process (DCR) to ensure fire safety norms is adopted for BMC schools. Fire drills to be organized in BMC schools.

- The corporation needs awareness about the money spent on education versus the dropout rates.

- Most computers for children in BMC schools are either not working or not maintained.

- Water tanks, segregated toilets for boys and girls, kitchens for midday meal and drinking water quality be regularly checked and maintained in BMC schools.

- Need for BMC middle and secondary schools. With the current budget BMC can afford integrated schools till 10th /12th standard.

- Health programmes to be integrated with schools.

- Several grants available at the State Level must be accessed by the municipal corporation.

- Cases of rape and eve-teasing of girls have been noted, appropriate measures for safety to be adopted including proper lighting of campus.

- Teacher pupil ratio of 1 to 30/35 according to RTE norms be followed. Number of classrooms to be designed to suit the same. Schools must be RTE compliant.

- Committees for education in each Prabhat formed out of elected representatives to focus on key education issues. Schools in each neighbourhood to be responsible for the education and enrolment for children in that neighbourhood.

- Schools must become hubs for community programs, study classes and reading melavas. The Development Plan 2014-2034 have reservations for libraries.

- Rebranding of BMC schools, they could have names of mountains, rivers, flowers etc. to development pride among students.

- Some suburbs do not have BMC schools. MCGM to check and stop malls from being built on plots reserved for schools.

4. The organisation YUVA gave a short presentation giving certain suggestions and fact findings as follows:

- Several areas need more schools like Dadar, resettled areas like Vasi Naka need schools. There are inadequate schools in M/East, M/West, G/North, P/North, H/East wards.

- Education is an important topic considering the urban poor.

- Rs 53,000/child/year, i.e. Rs 4417/child/month, i.e. Rs 147/day/child is spent.

5. ED, UDRI stated that there are gross violations of RTE norms. The preparatory study to have a clearly defined vision and goals set for education

6. DMC, Education asked the forum to consider number of rooms in the school, and the number of shifts the school operates in and then calculate the area per person.

7. The organisation YUVA stated that according to Census 2011, 1871 more schools needed. RTE norms to be followed for amenity space, science lab, sports facility and computer rooms and reservations to be made in the Development Plan for the same. Hostel and storage for books and uniforms of homeless or street children to be made available. This would also protect education of slum children when their families are evicted from slums.

8. An individual from Aapnlaya who works predominantly in areas near Deonar Dumping ground, stated that a detailed school wise gap analysis has been submitted to BMC where 22 schools run in 6 buildings. There is a need for secondary school in Shivaji Nagar. Adequate safety measures and quality assurance be given to BMC schools. Since education is mainly required in slum communities detail slum studies must precede the Development Plan Implementation.

9. An individual from, EDUCO stated that there waiting list for school admission. Playgrounds, physical training teachers needed since students have reached national level sports competition. Safe interaction spaces for girls are needed especially in Kala Ckawki. Community level work needed for education.

10. An individual stated that Goregaon Aarey Colony has 7 villages on hills with no primary schools accessible to children or transport facility. The DP must provide schooling facility for them. Vocational training plans to be incorporated in the Development Plan. Parent and community involvement needed. Cleaning of schools and removal of unused material essential.

11. An individual from YUVA stated that the Development Plan should clearly demarcate private versus public schools, illegal or non-recognized schools. Accessibility mapping of primary and secondary schools and all other social amenity with density mapping. There is no school in P/North, Mudh-Marve, Erangal, Hera Devi Dongar village, Dongar pada etc. Considering the limited availability of land primary and secondary schools could be integrated. Mapping of all types of colleges, universities and colleges is needed.

12. An individual stated that in BMC schools poor quality of teaching especially in mathematics is due to unmotivated teachers. This results in poor quality of education.

13. An individual from YUVA stated that there are no BMC schools after 7th grade in the entire stretch of Malwani. Reservations for community centre or spaces which will take care of social amenities, women training centres and vocational training centres. Aanganwadis must have basic infrastructure like toilets, water and proper structural space.

14. An individual from KRIVIA stated that the current benchmarks for amenities like education, health and open spaces are extremely low. These are half of any standards followed in our country. This shows that the concept of public sphere in the city is extremely low and is continuously diminishing. Mapping of should be done per capita areas linked to income.

15. An individual from TISS asked for a road map to MCGM for planning for education, policy fallouts for public private partnership for education and asked for an audit of the profit agencies working within BMC schools.

16. ED, UDRI summarized the points discussed and emphasized on the urgency of detail slum mapping and asked for a commitment on integrated schools in DP. Can open spaces near BMC schools be reserved for BMC schools during schools hours instead of giving them out to the clubs. Development Control Regulations (DCR) to have set rules for schools without which permission to run or build a school must not be given.

17. ChE. DP stated that:

    • Slum cluster detail mapping not required as of now. 151 sectors have been defined and will be taken into consideration for detail slum mapping during drafting Proposed Land Use (PLU). Ward level workshops will be conducted regarding amenities.

    • The ChE. DP committed to improve per capita standard considering current land constraints.

    • All BMC school plans are approved after scrutinizing of plans and checking for access for handicapped and computer room, libraries etc; hence all schools are handicapped friendly.

    • NGOs and concerned individuals must submit detail gaps for education to MCGM before ward level workshops are started so that they may work on that in advance.

18. DMC, Education stated that the Integrated schools up to standard 12th must be the minimum that the BMC should aspire to in the DP. He tried to put reservations for secondary schools. The Chikal Wadi School will be expanded. Community participation is needed in School Management Committees (SMC). He requested the attendees of the meeting to become a part of the SMC to improve quality of education. The constraints for toilet, light and ventilation are specific mainly for school running in the rented premises. He asked for a list of school with poor light and ventilation. The BMC expense is less than 20,000/child/year.

19. ED, UDRI requested that the planning sectors maps and details be made available publically on the MCGM website and the feedback for the same can be collected.

20. ChE. DP agreed to make the sector maps public once they are finalized.

21. Executive Committee Member, Pratham gave vote of thanks and concluded the meeting at 17:10 hrs.

Key Strategies for Education
1. Create a Greater Mumbai Education Master Plan
   The state of Maharashtra has prepared an Education Master Plan which does not cover Mumbai. A similar **Education Master plan is urgently needed for Greater Mumbai**. In order to do this a supplementary **survey of needs and existing facilities** will have to be carried out that can then inform the revision of the development plan. At the level of needs, this survey must also be informed by MCGM plans for resettlement (particularly in destination wards) in terms of population size expected to be shifted. The survey should identify
    i. Existing network of easily accessible publicly run educational institutions from Early Childhood Care and Education (ECCE) to XIIth class.
    ii. Existing Teacher Pupil Ratio (TPR)

    iii.   The language of educational instruction requested by communities.

    iv.   The demography of the area

    v.   Types of higher education facilities required (vocational, technical, professional, etc)

    vi.   Infrastructure provided (classroom, playgrounds, sanitation etc.)

2. <u>Follow RTE Norms for school infrastructure provision</u>

   Right to Education Act (RTE Act) norms must be the primary parameters for creating such a master plan. (Annexure A) However; if quality education genuinely must reach the underprivileged the MCGM must broaden their scope to include education from pre-primary (age 3) to 12th standard (age 18).

3. <u>Create Integrated Schools</u>

   In order to reduce out of school children it is necessary that a seamless education be provided from pre-primary to 12th standard so that every child has the opportunity to complete his/her secondary education. It is essential that "Integrated Schools' are provided for education from pre-primary till 12th standards. The MCGM should plan the DP for the provision of such integrated schools. Assuming that such integrated schools will have school strength of about 2000 students each, one would need to provide 376 schools in Mumbai city and 972 in the suburbs as per the 2001 census data. (assuming 22.5% of population is of age 3-18; schooling ages)

4. <u>Locate Integrated Schools in informal settlement in consultation with the community</u>

   The Existing Land Use Plan should map each slum unit/informal settlement and the usage therein. This existing land use has to be done in great detail otherwise the entire exercise is futile. Most schools will need to be located in informal settlements and the DP will need to look at how such schools can be located within the slum neighbourhood in consultation with the community.

5. <u>Locate schools within each 'neighborhood'</u>

   The integrated schools need to be located within a 'neighborhood' or as close as possible such that children do not have to cross a highway, large junction, railway track or nala in order to walk to school. Provide for location of Aanganwadis in the Communities as most of the existing Aanganwadis are now run in private homes.

6. <u>Ensure reservations for Public Libraries</u>

   Public libraries are very important source of information dissemination. They add to the capacity of the city to think and encourages scholastic study. Hence it is imperative to have reservations for Public Libraries

7. <u>Consult Organization working in Education and involve parents and community</u>

   Community participation would be a central and overarching factor in planning, implementation and monitoring interventions for universal elementary education as envisioned by our Constitution. NGO's and people's organisations working in education need to be also involved in the preparation of plans as they are equipped with knowledge of ground realities and will be long term partners in keeping track of the delivery of the right to education.

8. <u>Consult MCGM Education Department</u>

   It is essential the MCGM's education department be consulted as part of the preparation of the development plan right from the initial stages of mapping and surveying. They will be able to

provide vital input on existing conditions and including their concerns into the plan will lead to better implementation.

9. Clearly demarcate private versus public schools, illegal or non-recognized schools. Accessibility mapping of primary and secondary schools and all other social amenity with density mapping.

RTE Norms and Standards

	Item	Norms and Standards	
1	Student Teacher Ratio	Admitted Children	Number of Teachers
	Class 1-5	<60	2
		61-90	3
		91-120	4
		120-200	5
		>150	5 + 1 head teacher
		>200	Teacher Pupil ratio (excluding head teacher) shall not exceed 1:40
	Class 6-8	At least 1 teacher per class so there shall be at least one teacher each for: • Science and Mathematics • Social Sciences • Languages	
		At least one teacher for every 35 children	
		> 100 children	A full time head teacher
			Part time instructors for • Art Education • Health and Physical education • Work Education
2	Building		
	All weather building consisting of • At least one classroom for every teacher and a office-cum-store-cum-Head teacher's room • Barrier free access • Separate toilets for boys and girls • Safe and adequate drinking water facility for all children • A kitchen where mid-day meal is cooked in the school • Playground • Arrangements of securing the school by boundary wall or fencing		

3	Minimum number of Working days/instructional hours in a year		
		Class 1-5	200 working days
			800 instructional hours
		Class 6-8	220 working days
			1000 instructional hours
4	Minimum number of working hours per week for the teacher	45 hours per week including preparation hours	
5	Teaching Learning equipment	Shall be provided to each class as required	
6	Library	There shall be a library in each school providing newspaper, magazines and books on all subjects including story books	
7	Play material, games, sports equipment	Shall be provided to each class as required	

PLANNING RECOMMENDATIONS FOR EDUCATION

Physical Access To Schools

Children should be able to walk to schools by themselves and not be dependent on working parents to escort them. For this the school should be located such that the child does not have to cross highways, heavy traffic junctions, railway lines, nalas and should be secure, clean and well lit.

Site Design Recommendations

• PRE PRIMARY SCHOOLS (age 0-6)

The Teacher Pupil Ratio should not exceed 1:25 as per ICDS norms. The Pre-primary school to have storage for resource material, children's toilets and staff toilet, safe drinking water, small pantry, secured outdoor play area with play equipment.

All Municipal Schools should have preschools and be made compulsory in the DCRs. In the Meeting many stakeholders raised the issue of not having enough preschools in the area, hence the permission to the school to build to be condition to having preschool.

• PRIMARY SCHOOLS (standard 1-5)

Current standards of Pupil Teacher Ratio in the MCGM is 50 students to a classroom. The RTE standard is 30 pupils to a teacher/classroom.

A primary school should have at least one classroom for each teacher/class, office and filing space/storage for teaching tools/head teachers office, staff room, kitchen, girls toilet, boys toilet, (with easy maintenance surfaces that can be kept clean by the children themselves and with good light and ventilation), drinking water fountain, wash up area/mori for hand washing and craft activity multipurpose hall, play ground with play equipment. A fence must be provided around school premises. All built spaces to be well ventilated and naturally lit. Playgrounds are to have shade trees. Provide informal seating for group study and play. All schools must be disabled friendly and deployed with special teachers.

- UPPER PRIMARY SCHOOLS (standard 6-8)

An upper primary school will have all of the spaces provided in a primary school and in addition must have a library/computer room, a science lab, rooms for extra curricular activities such as crafts, arts and performing arts.

- SECONDARY SCHOOLS (standard 9-12)

A Secondary school must have all of the space in a upper primary school and in addition have   subject specific laboratories and formal sports facilities,

SIZE OF CLASSROOM

The MCGM standard for classroom size is 17 feet x 22 feet (aprox 5 meters x 6.75 meters) This classroom size is adequate if a maximum of 25-30 students per class is maintained (the MCGM standard class size is currently 50 students)

LIGHT AND VENTILATION

Classroom must have large openable windows to allow for natural light and ventilation and to prevent glare (that is caused by small concrete grills that are often provided in schools). The windows may be secured by steel grills if required. Provide two access doors to each classroom.

NOISE REDUCTION

Orient classrooms to create secure outdoor courts while ensuring segregation of classrooms of different noise levels.

KITCHEN

A separate kitchen with smoke free stove and wash up sink to be provided for the preparation of the mid day meal. The kitchen must have easy maintenance surfaces and storage for utensils and provisions. The kitchen should be constructed as a separate structure with its own entrance and not as part of the school building.

TOILET DESIGN

The National Building Code (NBC) provides the number of students (male and female) and staff toilets requires as per the size of the schools. Toilets should be designed with adequate light and ventilation to

ensure that the toilets have enough natural sunlight and air movement to remove odour and keep the space dry .Fixtures and flooring should be designed to drain and where the children themselves can keep the toilet clean simply by pouring a bucket of water. Walls are to be tiled to allow for easy maintenance and the floors to be of non-skid, easy maintenance finish. The sizing of fixture should be done ergonomically for use by children.

STORAGE FOR CHILDRENS EDUCATION MATERIAL
The schools must provide each child with an individual secure storage space for their belongings. This is especially useful for children from slums and street children who otherwise have no secure space to keep their education material. This will also mean that children do not have to carry their entire load of books home and back every day as they can leave it in their classrooms/desk

Site Planning And Landscaping

Provide age appropriate play area. Primary and pre-primary school children will require space for group play with play equipment while older children will require grounds designed for formal sport and athletics. Play area to be appropriately designed with shade trees on the periphery, garbage cans, equipment and markings, stands or other seating, storage shed for ground maintenance tools. Ensure that the playground is designed with appropriate drainage to prevent water logging during rainy season. The walking paths and access to classrooms are to be paved with an even surface.

Safety

Provide boundary fencing around the school premises preferably a low plinth wall with a transparent fencing that allows monitoring of the premises from outside while still providing enclosure. All schools to have sufficient emergency exits as per building norms with sufficient corridor and stairway width.
All Schools to adopt building codes to have Fire/Earthquake safety and handicap Accessibility measures as per the National Building Codes. There shall be zero tolerance policy in these matters as they jeopardize the life and safety of children. Fire Drills to be made mandatory before giving completion certificate.

Handicap Accessibility

Provide ramps to all ground floor plinths to make at least the ground floor class rooms accessible. In secondary schools ensure accessibility to at least one of the laboratories and toilet and other common facility.

URBAN FORM

Meeting Minutes for Urban Form workshop coordinated by UDRI
Date: 15th of January 2014, Wednesday
Time: 15:15 to 18:30 hrs.
Venue: F/South Ward office,
      Conference Hall,
      Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg,
      Parel, Mumbai 400012

Attendees:

Name	Organisation
Sabah	TISS
Noel Surti	MQA
Maitreye Gulawoni	Egis-geoplan
Irfan Ali Khan	Ghar banao-ghar bachao
Noorullah Shaikh	Ghar banao-ghar bachao
Milind Repe	ALM-Kandiwali
Namrata Kapoor+5	SCE
Namrata Sharma	GDS
Arnab Chakraborty	IIT
Rachel Disilva	URF
Hrydhal Daman	Egis-geoplan
Mishkat Ahmed	Edifice
Christine Charles	CRY
Vidyadhar Date	
Rajeev Thakker	Studio X
Ajith Edathoot	IITB
Lubaina Rangwala	EMBARQ
Rupali Gupte	KRVIA
Dipti Bhaindarkar	KRVIA
Neera Adarkar	AA, GKSS
Shaikh Riyazuddin	AAPnalay
Ashish Sanyal	AAP-south
Anil V Bhingarde	
Deepali sawde	MCGM
Name	**Organisation**
Manoj Jewkar	MCGM

Nikhil Chaudhary	EMBARQ
Purva Dewoolkar	KRVIA
Varsha Killedar	Godrej & Boyce
Rajesh Mangela	MKSS
Lucy D'sa	H wert Ward
Namita Khatri	Apne Aap Womens Collective
A.V. Shenoy	Mumbai Vikas Samiti
Trupti Amritwar	MESN
S.M. Jadhav	MCGM
Unmesh Chaphekar	MTSU
Minal Shetty+1	KRVIA
Sudhir Badami	
Isaac Mathew	
Amita Bhide	TISS
Marine Joseph	YUVA
Meenal Kesarwani	Egis-geoplan
Akshay	Egis-geoplan
Shamsher Alam	Ghar banao-ghar bachao
S.Ragupathy	TCS
Atul Sathe	BNHS
Vijayshree Pednekar	MTF
Amit Mehrotra	Tata Housing
Parag Parekh	JPP
Vasudeo Shenoy	Karmayog
Vidya Vaidya	H (W) Word Federation
Vikas Dilawari	
Mahendra Vasavani	M Square
Arnab Jana	IIT Bombay

Sonal Shah	
Name	**Organisation**
Shweta Wagh	KRVIA
Faizan Siddiqi	MIT
Satyam Swanker	SONM
Roohan Ahmed Khan	Apnalaya
Alison Saldanna	Indian Express
Vinita Sahare	MCGM
Ganesh Shet	MCGM
Jigisha Parekh	Architecture Student
Sree Kumar	EMBARQ INDIA
Namrata Bagdare	Godrej
Sachin Mendhe	MCGM
Ajay Kanwar	Townland
Steven Bander	
Apne Aap Women's Collective	AAWC
Ram	GBGB.A
Priya Warker	CAT
Ashok Datar	MESN
Anil Trimbak	
V.B. Gandhi	
Vyjayanthi Rao	Teacher
Nibedita Mishra	Faculty
Ujwala J.Patil	M.M.K.S
Lalit Shah	MCGM
PK.Das	

Minutes:

22. Executive Director (ED), UDRI started the session by thanking MCGM for arranging this consultation.

23. ED, UDRI stated the following through a presentation focusing on what type of urban form Mumbai aspiring by 2034.

   - Pg. 135 of the Development Plan Preparatory Studies gives information about the Urban Fabric with examples of Null Bazaar and Dadar Parsi Colony.
   - DP should consider cultural significance of Heritage precincts and urban villages on urban form of city.
   - ELU and preparatory study report should include grade wise classification of Heritage buildings.
   - The builder or developer must not be allowed to dictate the urban form of Mumbai.
   - DP should aspire to increase open spaces in city. In public survey findings it clearly shows that people want gardens and parks, the sea front public open space is out of perception of users.
   - 70km of Mumbai's edge is a waterfront of which only 10km is open for public access. The Development Plan 2014-2034 (DP) must aspire to grant larger access to Mumbai's waterfront to the public thus defining its urban form in the process.
   - Mumbai is a city surrounded by water, existing Gaothans and Koliwadas use water edge very effectively.
   - Informal housing occupies 42% to 58% of the city hence detail mapping of slums is essential to understand impact of urban form of housing and all other amenities on DP 2014-2034 and make appropriate reservations for the same.

24. Executive Engineer, BMC informed that the tender under Request for Proposal for slum studies has been issued.

25. Advisor, MCGM stated that the infrastructure for health, education and other amenities have been considered in DP 2014-2034 keeping in mind the population of Mumbai, which includes slum population also.

26. ED, UDRI stated that:

   - Public housing must be developed by government/ MCGM and not builders or developers.
   - Development Control Regulations (DCR) must guarantee minimum quality of life through proper light, ventilation and set back guidelines.
   - Built form responds to public transportation and thus impacts urban form. Skywalks have completely destroyed existing pedestrian link especially near Santacruz and Vile Parle railway stations.
   - Coastal Regulation Zone (CRZ) has a large impact on urban form but the DP Preparatory Studies has no mention of CRZ.
   - Fragile or vulnerable areas have no mention in the DP Preparatory Studies with regard to Disaster Control Management. These areas need to be marked and have special considerations in the DP.
   - DCR has become larger than DP, emphasises extensively on Floor Space Index (FSI) and DCR is modified on an average once a month. DP must have guiding principles and DCR must be a tool to ensure these.

27. Mr N. Kilawalla stated the following through a presentation on transport related concerns regarding urban form

- Roads widths in Mumbai are fairly wide compared to several other cities. The wider the road increases the traffic. Disciplined traffic is required instead of wider roads.
- Western express highway should have dedicated bus lanes.
- It is a myth that public transport is meant only for the poor. Car usage can be reduced by better public transport.
- Care to be taken in the DP that elevated transport structures do not encroach on other areas. Spaces under flyovers are misused. Thus tunnels serve as better options compared to flyovers especially at junctions.
- Roads near stations must have pedestrianized zones as in any case they are dominated by pedestrians.
- 720 crores are spent on skywalks and they further damage urban fabric. Foot over bridges are unrefined use of technology. 100 year old tree branches are chopped for Vile Parle skywalk, while Dhobi Talao/ Metro Junction subway is excellently maintained as it respects the user.
- Mumbai Metro rail is the world's smallest route i.e. 11 km and has taken more than 5 years. Almost 1 lakh Sq.m huge station structures are proposed at every 2 km. which uses up the compulsory 6m open space in several locations. How this issue will be managed must be envisioned in the DP. Mumbai Metro is unprofitable and it cannot be efficiently used for SEEPZ and MIDC

28. Mr Vikas Dilawari stated the following through a presentation:

- Conservation is essential for urban form of the city and reservation for the same must be made in the DP. Map and protect heritage buildings in the DP. Development plan must show 100m and 300m regulatory zones for heritage. Acquiring and management of these sites must be planned along with the review of the heritage building listings.
- Many important heritages are neglected at present like Shewri fort, Mudflats and many institutes like Hawfkin Institute.
- Gilbert hill is 65 million years old and is single columnar basalt and will collapse if any more quarrying is done. This hill will be lost if 9/10 storey SRA buildings come up around it. There are only two of its kinds in India. Bara Devi temple in Parel has the oldest monument in the city.

- Urban villages should be protected from getting lost in high-rise development.

- Of the 16,000 cessed properties 5000 are more than 100 years old; hence issues related to conservation of them should be considered in development plan.
- Several heritage sites have close proximity in the city and thus these must have an integrated plan in the DP.

- Development and conservation must find a balance in the DP.
- Mumbai's density of population is already higher than other international metro cities. Preserving urban fabric can help to maintain quality of life instead of making worse through redevelopment.
- Repair and reconstruction of buildings should be preferred instead of constructing new buildings with offbeat typologies of building like G+5, 6 stories of parking podiums which disregards the quality of life in streets.
- The city is already extremely dense and thus the DP and the DCR to give to encourage repairs instead of redevelopment. When TDR is given for reconstruction it can be given for repairs as well. Repairs are less expensive and more energy efficient compared to redevelopment.
- Encouragement must be given for adaptive reuse.

29. Advisor, MCGM asked Mr Vikas Dilawari and ED, UDRI to make available the detail heritage regulations for several precincts to MCGM DP department.

30. Director, Kamla Raheja Vidyanidhi Institute of Architecture and Environmental Studies (KRIVIA) gave several suggestions as follows to increase public space:

- Public space can be increased by modifying the DCR. Public space in Mumbai is very less at 1.2 sq.mt./person. Private open space can be made available for the public realm by giving incentive to private space owners.
- All new developments to mandatorily have public realm at various levels, which may connect to major railway stations and roads.
- Public realm in privet building can be incorporated through DCR. This might help in adding some amount of public space to city.
- Space above the railway lines can be used for public space as done in Hong Kong.
- Mumbai sea edge can be used as pedestrian walkways. Creek edges must respond to create public spaces.
- In existing city form spaces and bazaar streets allows activities to create linear pedestrian link system to railway station.
- Dharavi can be pedestrianized while a loop vehicular public transport can be designed around it.
- Make natural features like mangroves accessible as public space using eco-sensitive design solutions. Concretization of nallas must be stopped.

31. Ms. Neera Adarkar stated the following through a presentation:

- Elements that clearly affect the urban form and impart identity to the locality are open spaces, built environment, semi built environment, building heights, footpaths and streets, marginalised open spaces, nallah etc. and thus the DP and the DCR must clearly address these. The identities imparted by the above may be cultural, social and environmental.
- As per the 1991 DP there were 3246 open spaces which occupied 2968 ha. and 309 water bodies that occupied 895 ha.
- Mumbai has good citywide distribution of open spaces as one can reach them within 5 minutes of walking distance.

- Of the total open spaces in the city only 36% are freely accessible while 10% have restricted entry, 31% are not in use and 23% are occupied sites. The vacant and unused open spaces must be acquired by DP.

- These open spaces must have physical, design and maintenance accessibility to all the citizens. High compound walls, parking, hawking and encroachment along the edge deny visual access to open spaces. Kattas serve as better design solutions than high walls. All open spaces must have provision for ramps and railings. The DP and the DCR must address these issues.
- Eco- sensitive open spaces and water bodies must be preserved and not necessarily made open to public. E.g. mangroves of Sion-Mahim Link Road, water body in Chembur, hill slopes in Tardeo and salt pans in Mulund.
- About 19% of the total open spaces are occupied by Slums. MHADA to take over the development of slum occupied open spaces and release back maximum area as open spaces.
- All open spaces in the city should be available for use in afternoon for the benefit of senior citizens, small children, women, student, informal workers etc. Currently the entries to play grounds in Educational institutes are denied. The entries to be made open for public after school hours.
- Road signage must show nearby open spaces.

32. Mr Shirish Patel stated that 4 FSI is not workable through the following:

- Mumbai island city's gross density is 448p/ha while Manhattan is 250p/ha.
- The area required for every one hectare of buildable area either, the area required for institutional, street and open space is very high or gross density is too high. The DP and DCR must ensure the area required for amenities and street space before giving permissions for such high FSI.
- Thus not FSI but density must be used as a tool for redevelopment. The holding capacity of each area to be determined and then the FSI to be derived on this basis for the specific site.
- Mumbai must set aside land for affordable housing at about 25% to 50% like many countries in the world, where construction cost is taken from its residents but they are not charged for land.
- Looking at existing infrastructure, the city may not accommodate beyond certain density, hence DP should demarcate area wise permissible density.

33. Ms Rupali Gupte stated through the following through a presentation:

- Urban form is related to livelihood and infrastructure for livelihood. Housing types enable certain work and living relationship, especially the space outside house. E.g. kumbhar-wada and fishing villages. SRA development does not provide for such spaces.
- Instead of completely destroy work and live relationship, "conservative surgery" approach helps to keep urban fabric and increase housing stock.
- Separate DCR must be made for repair, retrofitting and up gradation for existing villages, chawls and slums. City has a large housing stock in the form of chawls. These can be upgraded with internal toilets and elevators.
- DP should reserve typology like chawls for senior citizens in future for hostel and housing. As the cities average ages is going to grow by 2034.
- Site and services schemes must be facilitated and legislated through urban design guidelines.
- FSI free spaces in DCR should accommodate and encourage entrepreneur activities considering cities changing economic/ livelihood pattern.
- Discourage parking and introduce typology with G+2 work spaces within residential apartments.
- FSI should not be allowed to dictate urban form in the city. FSI of 500 tenements to a hectare is very high in the case of slums. Slum rehabilitation schemes must not compromise on light, ventilation and setbacks.
- The DP and DCR to protect primary activities like dhobi ghats, fishing, net making, boat repairs, agriculture. These require adequate market space, toilets, crèches etc.

- Reservations must be made for skill up gradation centres in every ward.
- DP should encourage urban agriculture.
- Reservations for rental housing, hostel, and night shelters must be made in the DP.

34. Ms Sweta Wagh, KRIVIA, stated that DP needs to map CRZ.

35. MCGM expressed their desire to include urban design as a part of DCR.

36. Mr Prasad Shetty stated the following points:

- Economic generators for Mumbai are not clearly mentioned for next 20 years.
- Depending on culture driven economy is feasible option.
- The formal industries have shut, manufacturing industries are taken over by China and finance and commerce offices are moving out of the city as the need for their proximity has reduced.
- The DP should plan for the economy and economic generators of Mumbai for 2014-2034.
- There is a scope of cultural driven economy for:
  i. Tourism – Heritage Assets (artifacts, buildings, precincts, neighborhoods), Environmental Assets (Forest, Sea, etc.), Cultural Assets (Festivals, Food, Shopping, small industries, etc.), access to nearby tourist places.
  ii. Media – Film, Television, Advertising, Print, etc.
  iii. Design – Fashion, Jewellery, Websites, etc.
  iv. Local Economies – Fishing, garments, embroidery, food, pottery, cane/wood/metal works, recycling, etc.
- Urban form helps to build up cultural relationships within the city. Hence City requires form based code for development.
- The average age of population will raise for 2014-2034 and thus the DP and the DCR to plan for the elderly.
- The DCR and DP to check against the rise of gated communities with the upcoming redevelopments.
- Loss of ground floor space to parking is detrimental to urban form of the city.
- The DP and DCR to ensure protection, promotion and encouragement of cultural assets and industries, cultural infrastructure.

37. ED, UDRI requested to mention current audit of infrastructure in relation to FSI increase in DP.

- There is no analysis of carrying capacity of increased pressure on vehicle and road. FSI increase is indexed against road and other social infrastructure. FSI permissions must supplement with amenities and carrying capacities of localities.
- Projects by various special planning authority should be in control of nodal agency i.e. MCGM.
- DP should include Mapping of heritage precincts and elaborate brief for heritage conservation.
- Allow repairs of buildings with different regulations instead of same approval process as new construction.
- Along the proposed metro corridor footpaths are reduced to 6 inches and 8 inches. DP does not mention any policy regarding the up gradation of footpath widths.

38. Advisor, MCGM stated following points:

- DP will balance open space and FSI requirement through redevelopment.
- 2 sq. m. per capita open spaces is bench mark that can be improved.

- DP will concentrate on managing car ownership and traffic; by reducing car parks in congested areas and creating housing stock for those who does not want to own car has affordable implications.
- In preparatory study it is mentioned that idea of increasing planning requirement even after increasing vehicular ownership, that is not going to solve Mumbai's traffic problems.
- For cessed buildings redevelopment will occur through market forces, DP should keep check on FSI quantity and look for new areas that can be opened up for development.
- MCGM cannot acquire buildings to create open spaces.
- In redeveloped tall buildings density is not high as they are bigger sized apartments.
- Instead of DP monitoring the frequently needed DCR amendments external agencies of citizens may possibly keep check on the DCR modifications
- The financing mechanism for Development plan is being worked out separately. It is not included in Preparatory study report but it will be mentioned in Draft development plan.
- DP is looking into policies which may exclude fixed physical incentive like FSI.
- High prised area may not have same incentives in physical term as compared to low prised areas.
- Redevelopment area can be defined by planning authority to control upon haphazard selection of 4000 sq. m area for cluster development.
- Improving space availability for Additional infrastructure like roads, sewerage, water supply, open spaces will be considered in DP.
- Inclusionary housing has been addressed in the preparatory studies. The construction for these could be given to a developer, ownership and maintenance to NGOs and subsidies could be given by the government on the basis of family income. The public authorities would take over the stock while the rest of the tasks could be managed by third party.
- The planning sectors are made considering physical boundaries such as railways, major roads etc. The second tier plans would show more details
- DP may control the density but it might not be implementable as slum population growth is difficult to envision for future.
- DP prescribes the right of way, which is not negotiable.
- Heritage precinct regulation will be incorporated in DP. Requested for detailed separate discussion to look into what has been formulated by heritage committee so far and make that available to DP department.
- The heritage regulations presently hinges upon only one line in section 22 of MRTP act. There is no legal provision, hence it is inherently a part of DP but it needs to be considered in detail.
- Transparency in regulations and management of heritage precincts can be a part of DCR.
- Detailed planning in second stage can incorporate urban form considerations as DP discussed the larger level of city.
- Mapping of urban villages along with separate regulations is under process. Adivasi padas are difficult to map through satellite image.
- It is difficult to put cities economy drivers physically on map as economy change in 20 years is difficult to envision today.
- Agreed allow mixed use development to promote work-live culture.
- Metro station in heritage areas should be planned considering its historic importance.
- DP department might not be able to map slums in current mandate and consultant's background but the requirements for this population are being considered.
- MCGM agrees that minimum footpath widths will be mentioned along with the right of way for roads.

39. Ms Sonal requested that the planning sectors made considering different urban typologies to ensure continuity within them, micro level planning for respective precincts impact larger sector of the city.

40. Ms Sonal requested that DP must enforce a check and monitor development.

41. Lecture from academy of architecture suggested for a new govt. body for Mumbai similar to urban arts commission in Delhi to review projects before implementation.

42. Mr Arnab Chakraborty suggested that the DCR must incentivise acquiring open spaces financially.

43. Ms Priya requested that the glass façade buildings must be removed.

44. An issue was raised that MCGM must device height control regulations while incentivising FSI.

45. Mr Shirish Patel stated that the example of UK can be applied to Mumbai where the developer of every new development must compulsorily ensure and improve the amenities of the area.

46. A suggestion was made that limiting densities be arrived at for each localities keeping in mind the existing amenities and these densities must guide the allowable FSI in those localities.

47. Hussian, KRIVIA stated that there is a fear of Bhendi Bazaar redevelopment would end up as a gated community as it is being controlled by certain communities.

48. Mr Arnab Chakraborty stated that Mumbai should have adequate facility ordinance like in USA, where no new development proposals are passed till public amenities in that area are developed to manage the increase in people.

49. Mr Sudhir Badami stated that road space can be improved by developing the public transport and pedestrian infrastructure.

50. Individual stated that the DCR must take up green norms to account for rise in temperatures due to density and urban form. DP must consider sea levels particularly for storm water drains and sewage.

51. Individual requested to give formal space to informal recycling industries.

52. The meeting concluded at 18:30 hrs.

STRATEGY for better Urban Form

Demarcate the planning localities
Mapping of the city should be carried out to identify the various localities. These localities can be mapped based on similarities in history, show similar livelihood patterns, those developed by a certain agency (government/ private/trust) or developed at a given point of time, or slum pockets, or showing certain common physical characteristics.

Studies of each of the localities
Each of the localities need to be studied in detail to understand its present activities, existing infrastructure, building heights, ground coverage, setbacks, FSI, typological conditions, livelihood patterns, light and ventilation conditions, plot sizes, etc. This would be towards establishing building potential.

Develop specific DCR for each of these localities

Based on these studies, develop specific development control regulations for each of the localities.

Establish Difference between Development Right and Building Potential

There may be difference between development rights available to plot owner and the building potential that is available on his/ her plot. If the difference is positive, i.e. if the building potential is lower than development right then the balance development right should be transferred to localities having building potential higher than development rights. This means localities which have higher infrastructure etc. can absorb development from localities having lower infrastructure.

DCR for informal localities

Localities with significant amount of slums, should be identified as informal localities and special development control regulations for up gradation and reconstruction of such localities should be formulated with community participation.

Language of DCR to be simplified removing all possible individual interpretations.

The Written regulation can be interpreted in many ways and needs to be concise and unambiguous. No Discretionary modifications to DCR should be possible. FSI should be defined in clear and complete terms with no "free of FSI" spaces like flower beds, balconies, car parking, etc.

Section 33 of the DCR to be removed.

Section 33 of the DCR have been relaxed compromising the habitability aspects. This should not be carried forward into the new DCR.

Implement systems for evaluating the urban impact of infrastructure through a transparent community participation process.

Approval submissions for large public projects (exceeding 5000 sqmt) should contain an impact assessment of such a project on the locality. Such a proposal should be made open for public review. The suggestions and objections of the people, if found reasonable, should be incorporated in the design.

TDR needs to be indexed as per the value of property when transferred between areas.

TDR needs to be indexed as per the value of the property in generating and receiving parcels. This means that FSI generated in a low value area will be proportionately reduce as it is transferred to a high value area. This is so to create a more even distribution of development across the city so that TDR can be used as a generator of positive urban form.

New forms of town planning schemes will need to evolve

New forms of town planning schemes will need to evolve that are appropriate for Mumbai where land is of such high value. The pitfalls of traditional TPS schemes that have been attempted but failed in Mumbai must be studied to evolve an implementable mechanism.

Incentivise residential, commercial and amenity plots to give barrier free public spaces to the city so that the percentage of public space per person can be increased. Encourage the creation of Urban open spaces such as plazas and promenade

Environmental features should be protected
The edges along water courses need to be protected and reserved as public open spaces. Further efforts should be made to open private occupation of water edges to public.

KEY RECOMMENDATIONS

- DP should consider cultural significance of Heritage precincts and urban villages on urban form of city.
- ELU and preparatory study report should include grade wise classification of Heritage buildings.
- DP should aspire to increase open spaces in city. In public survey findings it clearly shows that people want gardens and parks, the sea front public open space is out of perception of users.
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TRANSPORTATION and Urban Form

- Western express /Eastern Express highway should have dedicated bus lanes.
- Care to be taken in the DP that elevated transport structures do not encroach on other areas. Spaces under flyovers are misused. Thus tunnels serve as better options compared to flyovers especially at junctions.
- Roads near stations must have pedestrianized zones as in any case they are dominated by pedestrians.

- visible improvement in pedestrian infrastructure (pedestrian aspect is totally missing at junctions, subways, raised zebra, crossing, traffic calming etc for safety)
- visible improvement in cycling infrastructure (safe cycle track network, Govt bike sharing centres, cycle parking spaces etc)
- Seamless integration of all the modes of Transportation (single card system, physical integration of train station and bus stops, taxi/rickshaw stands, information integration)

HERITAGE and Urban Form

- Conservation is essential for urban form of the city and reservation for the same must be made in the DP. Map and protect heritage buildings in the DP. Development plan must show 100m and 300m regulatory zones for heritage. Acquiring and management of these sites must be planned along with the review of the heritage building listings.
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PUBLIC SPACE and Urban Form

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- Dharavi can be pedestrianized while a loop vehicular public transport can be designed around it.

- Make natural features like mangroves accessible as public space using eco-sensitive design solutions.
- Concretization of nallas must be stopped.

OPEN SPACE and Urban Form

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- Of the total open spaces in the city only 36% are freely accessible while 10% have restricted entry, 31% are not in use and 23% are occupied sites. The vacant and unused open spaces must be acquired by DP.
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- Road signage must show nearby open spaces.

DENSITY and Urban Form

- Mumbai island city's gross density is 448p/ha while Manhattan is only 250p/ha.
- The area required for every one hectare of buildable area either, the area required for institutional, street and open space is very high or gross density is too high. The DP and DCR must ensure the area required for amenities and street space before giving permissions for such high FSI.
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countries in the world, where construction cost is taken from its residents but they are not charged for land.

- Looking at existing infrastructure, the city may not accommodate beyond certain density, hence DP should demarcate area wise permissible density.

LIVELIHOODS and Urban Form

- Urban form is related to livelihood and infrastructure for livelihood. Housing types enable certain work and living relationship, especially the space outside house. E.g. kumbhar-wada and fishing villages. SRA development does not provide for such spaces.
- Instead of completely destroy work and live relationship, "conservative surgery" approach helps to keep urban fabric and increase housing stock.
- Separate DCR must be made for repair, retrofitting and up gradation for existing villages, chawls and slums. City has a large housing stock in the form of chawls. These can be upgraded with internal toilets and elevators.
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- Reservations must be made for skill up gradation centres in every ward.
- DP should encourage urban agriculture.
- Reservations for rental housing, hostel, and night shelters must be made in the DP.

HEALTH

Meeting Minutes for Health workshop coordinated with SNEHA & CEHAT
Date: 29th of January 2014, Wednesday
Time: 15:20 to 18:00 hrs.
Venue: F/South Ward office,
Conference Hall,
Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg,
Parel, Mumbai 400012

Attendees:

Name	Organisation

Kiran Sawant	Pukar
Shrutika Shitole	Pukar
Dhruv Kulshrestha	CEHAT
Kausalya Salvi	N.V.P.
Uday Chitnis	Godrej Properties Ltd.
N.G.Parasher	Steno
Arokia Mary	Yuva
Pramod Nigutkar	CCDT
Ram Adsul	CCDT
G.S.Rathod	Mumbai Port Trust
Milind H. Shidunkar	MCGM
Champaka Rajgopal	Groupe SCE
Lalit Shah	MCGM
Kaustubh Gharat	Praja
Balwant Kiran	Praja
Almeda Fernandis	
Sabah T2	TISS/FAOW
Dr. Vinayak / Dr. Ravindra	Niramay Health Foundation
Dr. Ravi Ramakant	KEM
Anjali Gokarn	Chetna Foundation
Mayura Tambwekar	G.D.Sambhare &Co.
Sunny Pawar	Minim Charitable Foundation
Balachandran R.	MCGM
S.R.	Health
Shaila Bhor	Mumabi Mobile Creater
Divyanand Raj	CRY, Mumbai
Dr. Saeeda Khan	Nagar Sevak
Sreya Muzumdar	KRVIA

Kaumudi More	KRVIA
Anil D. Kshirsagar	MCGM
Jall Cowasji	Self
Sona Contractor	CEHAT
Sumeet Pokharnikar	CEHAT
Vasant Patil	Individual
Arifa Khan	Mahila Vikas Parishad
Shabnam	Mahila Vikas Parishad
Yasmeen Khan	Mahila Vikas Parishad
Malathy Iyar	TOI
Vaijayanti Bagwe	CCDT
Mrs. Sucheta Patil	Mumbai Vikas Samiti
V.S.Sahare	MCGM
A.V.Shenoy	Mumbai Vikas Samiti
Leni Chaudhari	NSF
Ravindra Rathod	Niramay Health Foundation
Sushma Shende	SNEHA
Dnyaneshwar Tarwade	Apnalaya
Yogesh Dhaigude	SVD
David Cardoz	CCDT
Nachitet Borate	G.D.S.
Alok C. Kadam	Triratna Prerana Mandal
Santosh B. Dhuri	Nagar Sevak
Sumati Belady	Yuva
Vrushali Naik	MMC
Minal Ratod	KRVIA
Meha Kumar	KRVIA
Shruti Boparikar	KRVIA

Prajakta Gawade	KRVIA
Shweta Wagh	KRVIA
Namratha Rao	self

Minutes:

- Founder Trustee, SNEHA thanked the Chief Engineer Development Plan (ChE. DP) for arranging a workshop specifically for health. She stated that as per UDPFI 1.2 sqm per capita is the requirement for health amenities while currently Mumbai only has 0.385 sqm. Health is an important aspect of the city and adequate reservations is done for the same. Almost 20-30% of cancer and trauma cases come from outskirts of Mumbai in hospitals of the city and the space requirement should be considered for these people.

1. ED, UDRI stated the following through a presentation:

- As per the 2011 census only half of the required health facilities are available in hospitals of some sectors and in terms of landuse DP proposes only 1/4th of what is required. There is only one bed for a population of 1319 in Mumbai.

- There are several norms and standards such as NUHM, WHO, NBC, UDPFI. The Development Plan (DP) to review, commit and upgrade infrastructure to these standards for 2014-2034.

- Smaller heath issues escalate to big cases as efficient preventive and curative treatment is not provided.

- We need to provide sufficient buffer capacity in public health for people from rural region who are dependent on urban centres for such facilities.

- Mapping, provision and improvement of open spaces, sanitation facilities and solid waste management systems and services is crucial for health.

- Equitable distribution of preventive care, primary health facilities may reduce the pressure on general hospitals.

- Adequate Swasthya Chowkis should be provided for basic maternal and child health services in the smallest planning unit.

- The Primary Urban Health Centres (PUHC) must have provisioning for evening Out Patient Department (OPD), providing preventive, promotive and non-domiciliary therapeutic and

curative care (including consultation, basic lab diagnostics and dispensing). The DP to include DCR for PUHCs.

- DP must define localised solution in planning the network of maternity homes, post-partum centres, dispensaries and primary health posts can be upgraded to serve similar populations. These units could be treated as modules and replicated elsewhere in the all planning units of Greater Mumbai.

- Private and public hospitals cannot be clubbed to show adequacy of health amenities in the city. The DP must demarcate private and public health facilities separately.

- For equity in public health facilities development plan should give public health as priority.

- Incentive F.S.I. (Accommodation Reservation) must be given to hospitals on the condition that of reserving beds for the poor shall be through a public hospital referral.

- Mumbai is responsible for extending its health amenities for people from Raigad and other neighbouring areas since 30% of the state budget is given to Mumbai. Areas for trauma centres are reserved in the DP near accident prone areas especially Eastern and Western highways.

- There is a necessity for speciality hospitals in the city as these are currently only 5 in the city. There is also a need for tending to mental health treatment rehabilitation and welfare in the city. Addition of specialty wards for the extension programs of hospitals is required.

- Parking spaces for ambulances should be marked and reserved in the DP.

2. SNEHA presented the ward wise deficiencies of numerous health facilities considering several standards and stated the following:

- There are several standards in health care such as NBC, UDPFI, IPHS, NUHM, NHM etc. MCGM must inform the citizens about the standards considered by them for DP 2014-2034.

- Development plan should consider the hierarchy of health facilities
    i. Primary facilities- maternal care, child care, curative health post, preventive care centres
    ii. Secondary facilities- peripheral hospitals
    iii. Tertiary facilities- speciality hospitals

- Primary health care and OPDs are needed most in the slums.

- The DP must reserve areas for presently inadequate facilities for chronic diseases such as cardio, TB, neurology, vascular, cancer, HIV/AIDs, geriatric problems, mentally challenged, trauma, emergency obstetric and neonatal care and ambulances.

- The services provided by U-PHC must include OPD (consultation), basic lab diagnosis, drug /contraceptive dispensing and delivery of Reproductive & Child Health (RCH) services, as well as preventive and promotive aspects of all communicable and non-communicable diseases.

- Area for additional mental health facilities must be reserved in the DP.

3. TISS presented a case study on M-East Ward, to give a brief idea about the health facilities available in low income group areas.

- Facilities are not equally distributed in Mumbai, they are more concentrated in few wards and few wards do not have adequate access to the health facilities.

- Health post of slums is not shifted from the slums which are shifted to new place.

- Development plan needs to look into the facilities like sanitation blocks, overhead water storage tanks, storm water drain and garbage vans.

- Land use category for Urban Public health post is not included in legend in preparatory study report, and these are not mapped. Also urban health centres are not mapped.

- Existing ELU report shows that education, medical facilities, open spaces, amenities are far below the standards mentioned by MCGM.

- As per the human development indicators we nees 1 hospital for 27438 population but Mumbai has 1 hospital for 66,881 population.

- Number of facilities, land availability, the accessibility to facilities and quality of services are the major concerns to the optimum utilization for health facilities.

4. Founder Trustee, SNEHA suggested that the SRA schemes could provide for spaces required by anganwadis, balwadis, nutrition centre, instead of offices.

5. Individual suggested that every ward must have one hospital of at least 100 bed with a blood bank, ventilator facilities and neonatal facility.

6. CEHAT stated the following:

- The concentration for hospitals is high in wards having people from middle and high income groups. Hospital permissions are reserved for wards which have few or no hospitals.

- 80% of the charitable hospitals have violated the provisions of Bombay Public Trusts Act, 1950 (BPT Act) and norms of the Indigent Patient Fund (IPF) in spite of the subsidies given

for FSI, land, water and electricity bills, octroi etc. Even the hospitals under PPP arrangement in Mumbai have failed to comply with the agreed norms. Thus :

    i. MCGM must develop its own infrastructure and not reserve/allot land for charitable hospitals and other private hospitals.

    ii. Permissions to set up private hospitals should be given on the basis of geographical distribution and population across different wards.

    iii. Adopt Right to Education model (multiple schools cannot come up in the same area) in healthcare.

    iv. To deal with space crunch and reservation of plots for healthcare must be done by providing additional FSI to the public hospitals.

    v. Additional facilities must be set up to deal with cases of violence against women.

7. PUKAR stated that permissions for building health care amenities in all the land that comes under MBT cannot be given by MCGM. These ares do not receive any BMC facilities like garbage collection thus resulting in poor sanitation facilities. BMC camps in such areas like Kaula Bandar have improved the conditions. The DP to consider such areas and plan their neighbouring areas considering the population and accessibility.

8. ED, UDRI stated that since the slums are not mapped 2/3rds of the city population's accessibility to health facility will not be planned for in the DP

9. ChE. DP promised that the above issue will be considered at the ward level planning.

10. CCDT stated that health facilities do not reach the national park areas.

11. Founder Trustee, SNEHA stated that areas need to be reserved in the DP for crèches, women crisis centres, women hostels and senior citizen day care centres.

12. TISS stated the following through a presentation:

- Public health post must be included in the land use categories for DP.

- The DCR must ensure quality of services provides in public health amenities.

13. Individual stated that open spaces must be converted into green spaces. For these areas to be beneficial to mental and physical health of the citizens their minimum size to be 1 acre. Provision of open spaces reduce loneliness in senior patients and also reduce the burden on health budget and economy.

14. Individual suggested collaborating the anganwadies with MCGM school.

15. Individual stated that the holistic approach in development plan can be useful. Sewage disposal, waste management, designs and amount of open spaces, Availability of adequate sunlight and ventilation in SRA buildings have major impact on improving health of citizens.

16. Student, KRIVIA stated that DP must reserve areas for de addiction centres and preventive health care systems.

17. Mumbai Vikas Samiti stated that the DP 2014-2034 must plan for a geriatric friendly city.

18. MCGM, ChE. DP stated

- Most of the discussed aspects are taken into consideration in preparatory study report.

- We will look into suggestions for development plan in next stages.

- Planning standard is site specific, planning standards are set considering space available, population density on land, available facilities and road network.

- Development plan has been planned considering to what can be achieved in 20 years.

- Setting up the standards which are too high to achieve is not implementable in future.

- The provision of anganwadi in SRA scheme along with balwadi is in process.

- ELU shows that privet hospitals are developed on privet land and the parcels which are reserved for public health facilities under MCGM will surely be developed by MCGM itself.

19. The meeting concluded at 18:30 hrs.

Strategies for provisioning of Healthcare infrastructure in the City
Review and up gradation of the existing Health Infrastructure

1) Currently there is an existing system of Municipal health infrastructure at the level of primary health

centers, dispensaries, maternity homes and general hospitals. There are currently 183 PHC in Mumbai, 162 dispensaries, 26 maternity homes, 23 post-partum centers and 25 municipal hospitals in Mumbai[1].

2) Integration of dispensaries and health posts – curative and preventive care have to go together to have more effective health outcomes. Integration

– 2004)

will help reduce requirements for doctors but will require more paramedics and will consolidate primary healthcare. Once this happens a referral system can be put in place which would reduce burden on hospital OPDs.

3) An initial mapping of the PHC / Dispensaries and closest referring hospital needs to be created that should also include the mapping of transfer routes requiring minimal time on the road. This would lead to a strong algorithm of referrals between the PHC and the hospitals ensuring smooth and quick transfer of the patients without worsening their conditions.

4) Provisions have to be made in order to facilitate the smooth transition of the existing health infrastructure to align to the levels of service provision and standards set in the National Urban Health Mission. The levels of service delivery mentioned in the NUHM need to be incorporated immediately into the existing infrastructure in the form of the Swathya Chowki, the Primary Urban Health Center and the referral units[1].

A Swasthya Chowki as per the NUHM is to serve a population of 10,000. This comprises of the community outreach segment of the NUHM. Under this segment, there are two further divisions doing community work of *Urban Social Health Activist and Mahila Arogya Samiti.*

This would be providing basic maternal and child health services, disease prevention services, would be somewhere between a health post and a rural sub center within a radius of 1 – 2 Kms. This could be manned by 1 ANM and a helper. It is to be noted that the Swasthya chowkis would be only for the slum population and located in slums. Swasthya Chowki should have a Registered Practitioner.

A Primary Urban Health center as per the NUHM is to serve a population of 50,000 with a concentration on slums and slum like areas. A PUHC is to have provisioning for evening OPD, providing preventive, promotive and non domiciliary therapeutic and curative care (including consultation, basic lab diagnostics and dispensing).

It would be staffed by 1 doctor, 2 multi skilled paramedics (including lab technician and pharmacist), 2 multi skilled nurses, upto 4 ANMs, apart from clerical and support staff and one programme manager for monitoring community mobilization, capacity building efforts and strengthening the referrals.

Consulting specialists should also be used on a consulting basis in areas where there is predominance of certain specific diseases in order to reduce the pressure on the referral units.

The network of 26 maternity homes, 23 post partum centers, some dispensaries and primary health posts can be upgraded to serve similar populations. There are currently 3 primary urban health centers that have been functioning in the areas of Malwani, Dharavi and Shivaji Nagar. These units could be treated as models and replicated elsewhere in the city in order to achieve greater coverage. These centers should also be equipped for emergency surgery.

Referral Units as per the NUHM are to act as referral points for different kinds of Health care services such as maternal Health, Child health, diabetes, trauma care, orthopedic complications, dental surgeries, mental Health, critical illness, surgical cases, etc. This part of the setup would address only the critical and complicated cases, which cannot be handled by the PUHC. The existing setup of the peripheral hospitals, state and super specialty teaching hospitals can be used for these purposes.

Use of Accommodation reservations and incentive FSI in the development plan

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[1] As the Framework for the National Urban Health Mission prepared by the Ministry of Family and Health Welfare

1) Many of the private hospitals are built on the plots of land reserved for the public health utilities in the development plan. This was done under the "Accommodation reservation" scheme, whereby private authorities were allowed to build on the designated land such that they keep a percentage of the facilities for the under privileged sections. This is not being followed in many private hospitals built under such considerations.

2) There is a need to map hospitals utilizing the accommodation reservations of the MCGM, in order to increase the accessibility of health care to the people.

3) Hospitals given incentive FSI based on the condition of having beds reserved for the purpose of the serving the under privileged should also be mapped in order to increase access to health care for the poor. This map should be made available to the public to facilitate the ability of the poor to access these hospitals. These hospitals should also be mandated to post signs that communicate their status as facilities with reserved beds for the underprivileged.

4) Almost all large private hospitals in Mumbai are Trust hospitals and many other hospitals have also received various concessions. The Trust Act as well as concessions given mandates about 20% of beds to be reserved for poor. This has never been honored by the private sector and the government has also never bothered to rein in this resource. If government takes charge of the proportional beds in private hospitals then we would have more than enough beds needed in the public system, especially specialty beds

Creation of Specialty Hospitals

1) At present there are 5 specialty hospitals of Kasturba, GTB Hospital, Acworth Hospital, ENT Hospital and eye hospital. However, there is a need for establishing more specialty hospitals in the fields of pediatrics, cancer, HIV and cardiovascular diseases. There is also a great need for tending to mental health treatment rehabilitation and welfare in the city.

2) It is understood that the expansion programme for various hospitals such as existing Bhagwati, Cooper, Govandi Shatabdi, Kandivilli Shatabdi and Trauma hospital at Andheri Western Express Highway has been undertaken. The group feels that this does not do justice to the WHO ratio of 1 bed for a population of 500. Hence it should be possible to have expansion programs for other existing hospitals such as Siddhart Hospital at Goregaon, S K Patil at Malad, Tagore Nagar Hospital, Kannawar Nagar at Vikhroli and Barve Nagar at Ghatkopar in order to try and meet this need. The addition of specialty wards to these expanded hospitals should also be carried out.

3) There is a dire need of trauma care centers on both the eastern and the western express highway to tend to the accident cases. The upcoming trauma hospital at Andheri and Bhagwati will tend to the western express highway, but there is a need of focusing on the Eastern Suburbs. Govandi Shatabdi and Mulund General Hospital can be considered for the up gradation and incorporation of special trauma units.

4) It was noted that there were not enough ambulances in the city, which to respond to emergencies. The few that are available are in very bad shape and do not have parking space. These parking spaces for ambulances should be indicated in the DP. Atleast one ambulance at small hospitals and two in the bigger hospitals should be provided.

5) Set up health emergency help line in all hospitals that have 24 hours functioning ER and disseminate this information widely so that the access of critical care would become much more systemized. This may in turn decrease mal-utilization of curative and emergency services.

KEY Planning Recommendations

- Equitable distribution of preventive care, primary health facilities may reduce the pressure on general hospitals.

- Adequate Swasthya Chowkis should be provided for basic maternal and child health services in the smallest planning unit.

- The Primary Urban Health Centers (PUHC) must have provisioning for evening Out Patient Department (OPD), providing preventive, promotive and non-domiciliary therapeutic and curative care (including consultation, basic lab diagnostics and dispensing). The DP to include DCR for PUHCs.

- DP must define localized solution in planning the network of maternity homes, post-partum centers, dispensaries and primary health posts can be upgraded to serve similar populations.

- These units could be treated as modules and replicated elsewhere in the all planning units of Greater Mumbai.

- Private and public hospitals cannot be clubbed to show adequacy of health amenities in the city. The DP must demarcate private and public health facilities separately.

- For equity in public health facilities development plan should give public health as priority.

- Incentive F.S.I. (Accommodation Reservation) must be given to hospitals on the condition that of reserving beds for the poor shall be through a public hospital referral.

- Land use category for Urban Public health post is not included in legend in preparatory study report, and these are not mapped. Also urban health centers are not mapped.

- SRA schemes could provide for spaces required by anganwadis, balwadis, nutrition centre, instead of offices.

- MCGM must develop its own infrastructure and not reserve/allot land for charitable hospitals and other private hospitals.

- Permissions to set up private hospitals should be given on the basis of geographical distribution and population across different wards.

- Adopt Right to Education model (multiple schools cannot come up in the same area) in healthcare.

- To deal with space crunch and reservation of plots for healthcare must be done by providing additional FSI to the public hospitals.

- Additional facilities must be set up to deal with cases of violence against women.

- Holistic approach in development plan can be useful. Sewage disposal, waste management, designs and amount of open spaces, Availability of adequate sunlight and ventilation in SRA buildings have major impact on improving health of citizens.

- In view of increasing population of senior citizens and nucleus families, Elderly care homes need to be established. Locations can be decided based on survey.

DIGITAL INCLUSION

Meeting Minutes for Digital Inclusion workshop coordinated with IIT Mumbai

Date: 5th of February 2014, Wednesday

Time: 15:00 to 18:30 hrs.

Venue: F/South Ward office, Conference Hall,
Jn. of Dr. Ambedkar Road and J. Bhatnagar Marg, Parel, Mumbai 400012

Attendees:

Name	Organization
R. Balachandran	Nodal Town Planning Officer, MCGM
Dinesh Naik	Assistant Engineer, DP, MCGM
Abhay Karandikar	Professor and Head, Department of Electrical Engineering IIT-Bombay
Pankaj Joshi	Executive Director, UDRI
Dr. Anita Patil-Deshmukh	Executive Director , Pukar
Siddharth Pandit	UDRI
Omkar Gupta	UDRI
Kaiwan Elavia+ 2	UDRI
Shrutika Shitole	Pukar
Sadhana Guldagad	
Shikha Pandey	Majlis
Krithi Ramanathan	IIT Bombay
Sudhir Badami	
Gurujeet Singh	Student Journalism
Veena Takle	SCE
Ar. Y.R.Pathak	G.D.S. & Co.
Vasant patil	Indivisual
Shruti Menon	Narotam Sekhseria Foundation
Ar. Rahul Mayekar	MCGM
Sukhatme Shirish	PEATA (PRESIDENT)
V.S.Sahare	MCGM

A.D.Kshirsagar	MCGM
Irene N	Sir J.J. College of Architecture
Sitaram Shelar	YUVA
Unmesh Chaphekar	MTSU
Sanjay M.	BMC
Tejal Shitole	Pukar
Kiran Sawant	Pukar
Anagha Kamat + 1	Journalism Mentor
Sanjay Kadam +2	Pukar
Afrel	Majlis
Arnob Jon	IITB
Pruja Warekar	CAT
Sabu Francis	
Ashwini Thakar	Bombay First
Nagendra G. Mirajkar	Dy Mumbai Port
Sushil Shinde	Tarai Foundation Trust
Ravina Aggarwal	Individual
A.V. Shenoy	MVS
Alok Thakor	Citizen
Mahesh V. Bafna	Citizen
Munjal Savla	Citizen
Vibha Kaushal	Citizen
Prakash Angane	Janata Jagruti Munch
Meera Malegaonkar	BDH
Manoj Jeikar	MCGM

Minutes:

1. Mr.Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay) opened the session stating the intent of the workshop, goal for Digital Inclusion with Universal access to Broadband, Information and communication Infrastructure, in Mumbai Development Plan, 2014-34.

2. Executive Director (ED), UDRI during his presentation stated the following:

   ii. Gaps exist in the optimum and existing levels of landuses in revision of Mumbai Development Plan (2014-34)

   jj. Future urban paradigms are equitable and inclusive development with knowledge economies, collaboration, responsive governance, efficiency, crowdsourcing. These demands for digital inclusion in information and communication infrastructure with focus on broadband penetration in slums/low income households in city.

   kk. Section 22(d) – Maharashtra Regional and Town Planning Act 1966. Mentions the extension and development of Transport and Communication Infrastructure.

   ll. During Development Plan of 1981-2001, MCGM has introduced and implemented telephone exchange / service centres. These interventions made a remarkable increase in telephone penetration in households in the following 20 years.

   mm. Similarly Development Plan for 2014-34 will need to have digital and broadband infrastructure. Because,
   - Universal access to knowledge, essential services and health facilities using internet technologies will lead to better quality of life.
   - Higher productivity for economic development.
   - Critical response in disaster management.
   - Efficiency in government data sharing and integration of resources.
   - Increased public participation.

   nn. Applications to Mumbai will be in various aspects like, education, health, disaster management, transportation, livelihood, governance, etc.

   oo. Elaborated these aspects stating its shortfalls and opportunities along with similar case studies.

   pp. MCGM will have to take an active role in
   - Creating a citywide middle mile infrastructure of optical fiber that would be enable access to internet
   - Making available of public and civic data publicly accessible on internet and multilingual

   qq. Suggested consolidated planning principles derived through various stakeholder's meetings
   - NECESSITY & DEMAND: Slums, low income households, 5 year implementation time frame, Universal access to broadband - Citizen's Right
   - IMPLEMENTATION GOALS: Municipal schools, libraries, fire stations, parks, transportation facilities, sewage treatment plants, 24*7 connectivity, Disaster Management, Private, municipal and public access points to broadband infrastructure.

- ROLE OF MCGM: MCGM- Owner of Municipal Broadband, Right of Way Issues, MCGM – Online citizen services and Municipal Data, MCGM- Planning and Monitoring, Public – Private Partnerships
- INFRASTRUCTURE: Scalable, Middle Mile – Citywide Optical Fiber, Technology Adaptable, 20 year usable timeframe.
- OPEN PUBLIC DATA: Education, Healthcare, Transportation and Governance, All MCGM Data and services online, Efficiency, reduced wastage and corruption, improve internal working of MCGM.

rr. Suggested approximate citywide landuse requirement:

- Fiber optic service network that connects fiber to the curb (FTTC).
- Mobile Switching Centers: 500 sq.m for every 3 wards = 4000 sq.m city wide
- Network Operations Center: 3000 sq.m

ss. Suggested Development Control Regulations:

- New development/redevelopment proposals to incorporate optic fiber network
- Public access points for broadband network in informal settlements & urban villages
- Broadband connectivity and municipal wi-fi in Public spaces.
- Fiber optic connectivity to all municipal services and ward offices.

tt. Planning for future demands of broadband in advance Ad-hoc development can be avoided.

3. Dr. Anita Patil- Deshmukh, Executive Director - PUKAR, presented following findings of the study focusing on access to internet in low income communities of city. (Case of Gazdhar Bandh, H-West Ward, population of 50,000 and area of 2.5 Sq. Km).

uu. PUKAR's role essentially was to bring to sharp focus the digital divide that exists in the poor income neighborhoods and the aspiration and needs of the marginalized people in relation to internet access

vv. Various services are available on internet but urban poor can not avail them due to lack of internet access which ultimately is leading to discrimination in society.

ww. 65% of households in city are in low income group.

xx. Findings of survey conducted within 459 households and 1377 individuals in selected area:

- 85% people do not have internet at home
- Most people earned between Rs.1000-15000 and are willing to spend between Rs 100-800 per month on internet. Average spending is Rs. 576 on internet.
- While some of the critical services like admissions, results, applications for jobs and various identity cards are available on internet most poor people do not have an easy and affordable access to internet.

- While 78 % people in this slum have heard about internet, 58% of those could not use it. 95% users belonged to age group of 14-30 years and as is the case with rest of domains, the gender divide continues within the digital divide as well with only 26 % female using internet while 74 % male usage.
- Young male population is the major user of internet in the form of 2G network on mobile, which do not allow them to access to e-services provided by MCGM.
- Most of the time the youth used internet for downloading either for entertainment or for school related projects (479 out 584 respondent) and social networking (477 out of 584). Very few could use it for any services (120 out of 584).
- When asked why they do not use mobile for other things, three reasons came through. First was related to speed. Most mobile phones with a package provide 2G services, which do not allow them to use it for anything else due to very slow speed. The 3 G mobile packs are unaffordable to majority of the youth. So they all end up using other avenues for Internet access. Those were cybercafé (163 / 584) schools or colleges (142/584), offices (109/ 584)). Those who could not access these services at schools or offices also could not access them at cybercafés.
- People cannot use Internet as only 2 cyber cafes are in the locality outside 1.5km radius, inaccessible and unsafe to female users.
- 95% people think that MCGM has a role in providing affordable internet.
- 87% people are willing to use internet provided in community areas and willing to pay for it.
- Majority of them wanted it is a form of kiosk and they wanted it in an open space.
- Dr. Patil-Deshmukh shared the information about all the services that are currently available on the internet and emphasized the fact that while some of the critical services like admissions, results, applications for jobs and various identity cards are available on internet most poor people do not have an easy and affordable access to internet.

yy. Recommendations for DP
- Making Universal and Affordable Broadband Internet as an Obligatory responsibility of MCGM
- Allocating space in the DP for building such networks in all communities especially low income households of Mumbai.

4. Mr. Abhay Karandikar, (Professor and Head, Department of Electrical Engineering IIT-Bombay), presented technical aspects of implementing universal broadband within the city.

- The presentation focused on

    i. Broadband Network
   ii. Current scene in Mumbai
  iii. Role of MCGM in DP related to internet
   iv. Case Studies
    v. Planning

- Currently, there are 15 million broadband connections in the country. He mentioned that TRAI's roadmap predicts 600 Million broadband connections in the country by 2020. In general, averages in Metro like Mumbai are expected to be higher than national average. Thus, he emphasized that by 2030, Mumbai should aim for universal broadband access for every household. By 2030, a city wide network is expected to connect all residential and commercial establishments, public wifi-spots and public safety and disaster management network including 24 hour video surveillance.

- If broadband speed of 2 Mbps as outlined in National Telecom Policy 2012 (which admittedly is a conservative estimate for 2030) was assumed, Prof Karandikar illustrated that universal access would require a whopping capacity of 50 Gbps/sq km in many areas of Mumbai with high population density even with such conservative estimates. He illustrated that this cannot be achieved with current cellular deployment of macro cells. The future evolution of wireless system is likely to be in the form of micro, pico and femto cells (collectively called small cells) which would be low power nodes with high spectral efficiency.

- He outlined the vision of providing fiber to the curb and Small Cell deployment of wireless nodes for meeting the high capacity requirements of broadband to every household in Mumbai.

- He informed that from DP perspective, MCGM has the following points of intervention-
    i. Right of Way for Fiber
    ii. Creating Middle-Mile Network
    iii. Zoning and Land use for Tower and Switching Infrastructure
    iv. Building code for enabling broadband.

- He further elaborated that MCGM should create the concept of Telecom Corridors, lay conduits and tranches, build middle mile network and rent/lease the corridor to the service providers.

- Further, MCGM should mandate builders to provide ducts for optical fiber during construction itself. This would also enable In-Building solution.   MCGM should also map all underground utilities including fiber ducts and should make it available for all service providers.

- In order to provide universal access for citizen services, MCGM should plan for providing free public hotspots, community kiosks and centers in designated locations. Mumbai DP

should aim to provide broadband for citizen services in underserved locations and areas of the city as one of the most important charters.

- Mumbai DP should plan for Municipal broadband network. The municipal broadband networks can be overlaid over the same telecom corridor as outlined above. It should provide high speed connectivity to all municipal schools, hospitals and ward-offices. It can also act as the backbone for public safety and disaster management including Fire Brigade, Police and Ambulances.
- He also emphasized that municipal interventions for universal access have been carried out in several cities of the world. He presented two case studies of Stockholm and Oregon.
- Finally, he illustrated by taking example of Mumbai H /East ward that it is indeed possible to conceptualize Telecom Corridor which can also be used for Municipal broadband network. Further details of implementations can be worked out with detailed studies. However, he submitted that Mumbai DP for 2030 should outline the vision for Broadband for All.

5. Mr. Krithi Ramamritham, Head of Centre for Urban Science and Engineering, Presented challenges in bridging the information gap through digital inclusion, The highlights of the presentation are as follows:

- Connectivity divide- as there is no connectivity or low band width
- Content Divide- no relevant content, not accessible, not updated, language barriers.
- Interfaces are not user friendly.
- Main challenges are type of information to be provided, sources of information, process of getting information, department involved, time and fees required.
- Listed and categorized citizen services into one time information, continuous, paid, free etc.
- Suggested citizens mobile applications based on crowdsourcing.
- Four components of information Location, Visuals, Annotations, Category of problems.
- Suggested integrated approach through Planning and Design, Policy and Governance, Infrastructure, Informatics for better quality of life.
- He shared a few ideas related to technology based innovation like Mumbai Navigator that shows maps of the city with various bus and train routes and makes communing much easier. He suggested that technology needs to innovate and make the quality of life better for the citizens.

6. Mr. Aloke Thakur, academician, journalist and citizen, quoted Section 22(e) –chapter-3 from Maharashtra Regional and Town Planning Act 1966, to explaining the possibilities to incorporate internet in future Development Plan. This clearly mentions the right to common man for public utility.

- The Act defines amenities and public utilities as public necessities, provision of internet infrastructure can be justified as this is the future necessity of every citizen
- Currently the Internet facilities are seen as need of certain class of people, but Internet facilities provided by MCGM will make such it public services and can be reached to larger population.
- Suggested provision of such Public utilities in Landuse Planning is the basic requirement.

- Suggested to provide dark fiber to every household in similar way MCGM has provided water supply, sewerage lines and other infrastructure
- Requested MCGM to have foresight and visionary attitude for Development Plan by clearly defining amenities responding to future necessities on people.

7. Mr. A.V. Shenoy, Mumbai Vikas Samiti, suggested providing facilities of higher standards keeping the vision for 2030.
    - MCGM should restrict its role in data maintenance and provision of basic network by providing primary and secondary server in respective wards and use existing laid network by privet companies to reach up to every household.
    - Stated hazards on health due radiation of Wi-Fi and mobile network should be considered while planning, Micro Cell technology is ideal solution.

8. Prof. Abhay Karandikar stated that principle concept of having right of way for broadband network is the priority, the implementation issues and strategies can be worked out in order to achieve standards.
    - Mentions the low power Wi-Fi network is low on radiation hazards and economic.
    - Stated that the new buildings should have a Code/ DCR to have optical fiber network and policies can be worked out to provide network in existing buildings
    - Providing Internet connectivity without the intervention of MCGM will not be citywide approach.

9. Mrs. Mira Mategaokar, citizen, stated that Development Plan should map the location of towers, and should give guideline in order to regulate radiation hazardless Broadband network. National level housing schemes should also include the provision of Broadband network in community.

10. Mr. Chaitanya Mehta, citizen, mentions opportunities and importance of technology and broadband in encouraging entrepreneurship in city which helps in economic development and contributes in GDP growth.

11. Sabu Francies, Architect & Software developer, suggests having a policy for crowdsourcing to implement the city wide broadband network. This will enable to connect the city without big efforts by single implementing authority. And to have incentives to individuals for contributing to City wide network.

12. Executive Director (ED), UDRI states that formal city can contribute in crowdsourcing but the informal city cannot be crowd-sourced for such infrastructure leading to exclusion.
    - Vision document requires to promising for Digital infrastructure when it mentions to have a global inclusive city by 2034.
    - Right of way for Broadband network has to be mention in Development plan.
    - All Municipal services to be connected via Internet.

13. Director of Public Forum, UDRI stated that basic Digital infrastructure should be provided by MCGM in similar way that basic water supply lines are provided by MCGM.

14. Mr. Sudhir Badami, Activists & citizen, mentions the importance of online services like ticket booking which has a remarkable economic value in saving time of travel, saving working hours in commuting at the location of service.

    - Also mentions the importance demarcating digital infrastructure on DP, in similar way MCGM has shown the future metro and monorail line.

15. Nodal Town Planning Officer, MCGM, stated to accept this new concept of Digital infrastructure, this will come under utility like many other utilities provided by MCGM,

    - There is no hindrance in implementing broadband infrastructure without including it in Development Plan, as road network is demarcated in DP, Broadband network can be laid below them, as there is no particular norm which prevents to have internet network below roads.

    - MCGM has a separate information technology department; they can manage the policies regarding the broadband networks in city.
    - DP-MCGM will make policy recommendations for including broadband and digital inclusion in Development Plan.
    - MCGM will consider the digital policy and zoning in terms of location of these facilities in Development Plan.
    - Network organization centres should be planned by separate agency in respective ward, it may not fall in Development plans Scope. In case it needs to integrate with Development Plan, MCGM will need to have inputs from separate agency showing, mapping the locations for such infrastructure. In previous years MTNL had suggested MCGM the desired locations of Telephone exchange in DP.
    - Development plan can provide Building Code to facilitate Broadband Infrastructure.
    - MCGM will include such digital infrastructure requirements in Development Plan report.

16. Engineer DP, MCGM, mentioned that detailed inputs from concern department have to come to development plan department regarding Digital Infrastructure.

    - Since the plan is for 20 years the landuse will demand for changes so Development plan cannot have inflexible policy and demarcated infrastructure.
    - Agreed to give enabling provisions for broadband infrastructure in development Plan.

17. Meeting conclude at 18.20 Hrs.

Key Strategies and Recommendations for Digital Inclusion and Broadband
Infrastructure in Revision of Mumbai Development Plan (2014-34)

1.1   Mumbai as a Digitally Inclusive and Connected City

The revised Development Plan for Mumbai (2014-34) should incorporate a Digital Vision for the city regarding the future of its Information and Communication Infrastructure. This Digital Vision should be based on the concept of Universal Access to Broadband for urban marginalized populations in Mumbai to address the purpose, beneficiaries and the medium for intervention. To remediate the disparity in human development through universal access, the plan should target broadband penetration of 100% households in Mumbai. It should also aim at achieving the affordability of this access.

The MCGM should state a goal of making Mumbai as a Digitally Inclusive and Connected City in its Development Plan (2014-34).

1.2   Policy Approach To Broadband Infrastructure

MCGM should recognize a **citywide broadband infrastructure as an essential part of communications network** that will need planning as an integral part of the revised Development Plan for Mumbai (2014-34). The successful implementation of this strategic plan should provide an impetus to its replication throughout the State of Maharashtra by an amplifying amendment of **Section 22(d) of the MRTP Act, 1966**. Equally, making adequate provision for the development of broadband infrastructure should, to begin with, be considered for inclusion in the list of obligatory duties of the MCGM and of the other Municipal Corporations in the State. These amendments formally recognizing broadband as part of communications network and an important component of a city's civic infrastructure will give a replicable model for installing and deploying broadband infrastructure across cities in Maharashtra. The policy should recognize the need for limited and well justified public spending for broadband infrastructure in areas where accessibility and affordability is an issue.

1.3   Universal Access to Broadband

All households, especially the lower income and urban poor households should be connected to the broadband infrastructure within 5 years. The city will integrate 'universal' access (all persons are covered) and 'inclusiveness' (access irrespective of socioeconomic variation) in its planning for broadband infrastructure. Universal access need not imply broadband connected to each and every home, but must provide for a **combination of private, municipal and public access points** to broadband infrastructure.

Universal access to broadband and communication infrastructure should be every Citizen's Right. The infrastructure should be a **combination of fiber to the curb (FTTC) + In building solutions and small cellular Cell** technology in dense areas where FTTC may not be possible.

1.4   Connectivity to all Municipal Facilities

All municipal facilities such as municipal schools, municipal libraries, municipal medical and health facilities, municipal markets, fire stations, municipal parks, sewage treatment and water installations, pumping stations, transportation facilities and network, Ward offices etc. should be **connected24*7 to**

broadband infrastructure. Equally, police stations and other similar public service institutions should also be connected. There should be sufficient **redundancy** built into the infrastructure to keep these facilities integrated and connected for efficient **disaster management** and quick **emergency response and rescue**.

1.5   Role of Municipal Corporation of Greater Mumbai (MCGM)

The MCGM will have to play multiple roles to play for effective deployment of broadband in the city.

- **Owner of municipal broadband network that will connect to municipal facilities**. The access points at municipal facilities are key to overcoming the digital divide between high income and low income and slum households for broadband access.

- **It should resolve any right of way issues for fibre optic deployment** over the middle mile network by developing standard practices to follow for digging up of the roads if any, before broadband infrastructure gets installed by telecom companies. This can also be achieved by creating telecom corridor by MCGM. The telecom corridors can be used by public and private service providers.

- It should estimate land-use requirements for small cell towers and switching infrastructure required for broadband deployment in the city over the next 20 years. The MCGM should **identify these land-use requirements** in the **Proposed Land Use** under the current Revision of Development Plan (2014-34).

- **It should incorporate broadband infrastructure in the building code through modifications to the Development Control Regulations**(DCRs). The specific modifications are mentioned in Section 1.6

1.6   Modification of Development Control Regulations (DCRs) for Broadband

The following changes are recommended for building code changes to the DCRs:

- All new **development/redevelopment proposals including SRA** will **incorporate in-building design provisions** for fiber optic network, indoor fiber distribution network and indoor fiber distribution hub.

- All **koliwadas, gaothans, agripadas, adivasi-padas and other informal settlements** will demarcate/list community spaces for **public access points'** provision of broadband network.

- All public open spaces, parks, parking lots, transportation facilities should have broadband connectivity and municipal wifi.

- All municipal developments, buildings, facilities such as schools, hospitals and ward offices should have fiber optic connectivity.

1.7   Programs and Open Data

The program areas such as Education, Healthcare, Transportation and Governance should be immediately adopted by MCGM for delivering content, data and programs to its citizens.

This would mean that the MCGM would upload its data related to these areas as well as the service offerings (e.g. school registrations, birth/death certificate registrations, number of beds in hospitals, bus schedules, reporting of problems in the Ward) on to the internet. MCGM should move ALL its citizen services online to improve efficiency of service delivery and reduce and ultimately wastage and corruption and improve the internal working and integration of services within the MCGM.

1.8   **Funding Options for Universal Access**

In order for MCGM to implement an inclusive network and access to Broadband for Urban poor, the following options to sustainable funding can be considered:

- Set up a City level Universal Access Fund comprising of fund to be earmarked for extending the access infrastructure to the low income areas which are otherwise considered commercially unviable. Appropriation from existing or additional cess (eg. Education cess) and contributions (eg CSR funds from local service providers/operators – part of the obligatory 2% CSR funds could be asked for here).
- Set up municipal owned wireless broadband access networks in a public private partnership mode
- A common agency (Mumbai Digital Inclusion Agency) to be set up which will manage and operate this fund, plan, implementation and provision of Citywide Universal Access to Broadband.

7.0   Supreme Court Intervention – OG Done

The UDRI filed an intervention application in the Supreme Court in the case of MCGM vs. Kohinoor CTNL case [SPECIAL LEAVE PETITION (CIVIL) NO. 33402/2012]. Against strong opposition, the UDRI's detailed submission on questions raised by the Court regarding issues of open space norms in buildings, legality of exemptions from the norms, the impact of FSI on traffic and present fire safety mechanisms for dealing with high rise buildings was accepted by the Supreme Court. The UDRI won a historic judgment which significantly impacts sustainable urban development in Greater Mumbai for the benefit of its citizens. The Order inter alia states:

- That the impacts of high rise buildings on neighbourhoods are to be evaluated before any permission for building is granted. This will only be done on the recommendation of the Supreme Court's constituted High Rise Committee on which one of the nominees is the Executive Director of the UDRI, Pankaj Joshi.
- The Court mandated that the minimum recreation space cannot be reduced at the ground level and substituted by creating a sham open space it at the podium level! The Supreme Court ruled that the developers have to provide the necessary open space (15% - 25% depending on the plot size) at the ground level and not at the podium level as was observed to be a growing trend in Mumbai. The

Supreme Court suggested that developers were free to provide recreational areas over and above the area mandated by Development Control Rule 23 at the ground level.

- The Court also mandated that a clear open space width of 6m on at-least one side of a building has to be provided for fire engines to manoeuvre. To cite two recent examples are the fires at Mantralaya and the Mont Blanc building at Kemp's Corner.

Refer Annexure ??? for the complete Judgement

UDRI ADVOCACY AND LETTERS

RTIs FILED

RTI were filed to obtain documents related to the Development Plan.

Date of Filing	Subject	RTI filled to	Date of receiving reply	Information Received
4/4/2013	Completion of Unrelated Topics	Chief Engineer MCGM		Yes
1/4/2013	Update of the Entire DP process	Chief Engineer MCGM		Yes
1/3/2013	Shifting of Deadlines	Chief Engineer MCGM		Yes
16/2/2013	Documents etc. Submitted by the MCGM to the Directorate of TP	Directorate of Town Planning Pune		Yes (All Maps Received)
29/11/2012	Detailed Project Report for Charkop-Bandra-Mankhurd Metro corridor implementation	Chief – Transport and Communications, MMRDA		Yes
28/11/22012	Detailed Project Report for Eastern Freeway Phase I implementation	Chief – Transport and Communications, MMRDA		Yes
9/11/2012	Financial Viability Gap Funding Details for Metro Corridors I, II and III	Chief – Transport and Communications, MMRDA	4/12/2012	Yes
23/10/2012	Archaeological Monuments in the ELU survey	Chief Engineer MCGM	2/11/2012	Yes

23/10/2012	Report on 1200 Micro and Macro Level Discrepancies	Chief Engineer MCGM	2/11/2012	Yes, Not yet submitted
22/10/2012	Documents etc. Submitted by the MCGM to the UD 1	UD Secretary	19/11/2012	Yes
16/8/2012	Data provided to the Consultant for the revision of the Development Plan	Chief Engineer MCGM	16/9/2012	Pending
9/8/2012	Task 4 Report on Growth Scenarios	Chief Engineer MCGM	11/9/2012	Yes, after the ELU
9/8/2012	Reasons for not doing Workshop 1 on time	Chief Engineer MCGM	11/9/2012	Yes, after the ELU
9/8/2012	Workshop 1 for the Development plan 2014-34	Chief Engineer MCGM	17/9/2012	No
9/8/2012	Task 4 Report on Growth Scenarios for the Development Plan	Chief Engineer MCGM	18/9/2012	No
5/7/2012	Population breakup of residents living in Slums of Mumbai as per Census 2011	Director Census (Mumbai Division)	12/9/2012	Not available at this time

5/7/2012	Population Breakup of residents in a slum pocket for the people living in slums based on census 2011	Directorate of Census Operations Maharashtra	19/9/2012	No
2/7/2012	Updated and Latest Version of the Existing Development plan for the City of Mumbai	Chief Engineer DP, MCGM	Appeal Pending at CIC	Pending
30/5/2012	Task 3 Report on the Assessment of the ELU	Chief Engineer MCGM	14/9/2012	No / Promised to give
30/5/2012	Task 3 Report on Assessment of Existing Status along with Thematic Maps	Executive Engineer DP, MCGM		Pending
29/5/2012	Information regarding Educational Facilities in the MCGM area.	Education officer-Education Department MCGM		Partial
29/5/2012	Information regarding Educational Facilities in the MCGM area.	Education officer-Education Department MCGM	14/6/2012	Partial
29/5/2012	Information regarding Educational Facilities in the MCGM area.	Education officer-Education Department MCGM	14/6/2012	Partial

29/5/2012	Information regarding Educational Facilities in the MCGM area.	Education officer-Education Department MCGM	5/7/2012	Partial
11/5/2012	Information regarding Educational Facilities in the MCGM area.	Education officer-Education Department MCGM	15/5/2012	Partial
10/5/2012	Obtain copy of Objections and Suggestions filed for Manori Gorai Uttan Draft Development Plan	MMRDA	08/06/2012	Yes
10/5/2012	Increase in TDR given to amenity letter written to UD1 by Subodh Kumar	UD1	Appeal Pending	No
19/4/2012	Report on the Existing Land Use Plan	Chief Engineer MCGM	15/9/2012	Yes
19/4/2012	Report on the ELU along with Maps for each ward	Chief Engineer DP, MCGM	13/6/2012	Yes

Check Pankaj Joshi

The Mumbai Heritage Conservation Committee was appointed in July 2012. The additional Heritage list was notified by MCGM on 30 July 2012. The UDRI has sent in it objections and suggestion to the additional heritage list by letter dated 28th August 2012 signed by Mr. D. M. Sukthankar and Mr Jamsheed Kanga and another detailed suggestions and objections on 27th August 2012 on UDRI letter head.

MUMBAI DEVELOPMENT PLAN (2014-34) LETTERS SENT AND RESPONSES –DONE OG

The UDRI engaged with candidates from various political parties who will be contesting the 2014 Lok Sabha Elections.

The Urban Design Research Institute since 2009, has been working on the Revision of the Development Plan 2014-34 for Mumbai, as a research organisation faithfully monitoring and constructively commenting on this process. We have closely worked with over 250 organisations and individuals representing thousands of Mumbaikars in 24 wards of Mumbai, The Mumbai Metropolitan Region and a group of over 1000 eminent citizens in Mumbai. Together we had formulated a set of Planning Principles for Mumbai which are attached herewith for your reference along with the representative signatories.

Kindly do let us know if you agree with the planning principles that we have enshrined. We are sure that you will find them important for the Development of Mumbai into an Open Equitable Efficient City for all.

We would be most happy to receive your comments on the planning principles and we will publish these comments in our annual publication called the "Mumbai Reader". The Mumbai Reader reaches across not only Mumbai but also universities abroad. The Mumbai Reader contains critical writing on Mumbai in over 500 libraries across Mumbai and India.

Kindly please do **respond** to our letter.

Enclosed:
- Planning principles
- Signatures endorsing the Planning Principles

The Following candidates were contacted for the inclusion of the planning principles in their manifesto.

Constituency		Political Party	Candidate's Name
No.	Name		
26	Mumbai-North	AAP	Satish Jain
		BJP	Gopal Shetty

		INC	Sanjay B Nirupam
27	Mumbai-North-West	AAP	Mayank Gandhi
		INC	Gurudas Kamath
		SHS	Gajanan Kiritkar
		MNS	Mahesh Manjrekar
28	Mumbai-North-East	AAP	Medha Patkhar
		BJP	Dr. Kirit Somaiya
		NCP	Sanjay Dina Patil
29	Mumbai-North-Central	BJP	Smt. Poonam Mahajan
		INC	Smt. Priya Sunil Dutt
		AAP	Phiroze Palkiwala
30	Mumbai-South-Central	INC	Eknathrao Gaikawad
		AAP	Sundar Balakrishnan
		SHS	Rahul Shewale
		MNS	Aditya Shirodkar
31	Mumbai-South	AAP	Meera Sanyal
		INC	Mllind Murli Deora
		CPM	Prakash Reddy
		SHS	Arvind Sawant
		MNS	Bala Nandgaonkar

Mumbai 7 Islands Facts Myths Solutions

Mumbai is a home to major financial institutions and headquarters of various Indian companies and multinational corporations. The inherent benevolence of several corporations to secure positive impact on the communities, cultures, societies and environments in which they operate in along with the CSR policy, corporations can play a vital role in the influencing city.

Corporations are proficient in setting robust objectives, undertaking potential investments, measuring and reporting performance publicly. 7 Islands Facts Myths Solutions serves as a guide to the citizens of Mumbai for the path that we can take to resolve city issues and re-evaluate myths.

Facts:
1. Mumbai, major contributor to the country
2. Mumbai is failing its citizens
3. Plummeting rankings
4. Bad cities are bad business.
5. Current efforts to improve the city are not working; governance is not up to the mark.
6. Public Open spaces in the city not sufficient
7. Flawed city governance structure

Myths:
1. Slums have taken over the city
2. No space left for development
3. We need higher FSI
4. We need to focus on elevated carriageways
5. We have done well in Parel and BKC
6. Planning doesn't work
7. Heritage is not important

Solutions:
1. Recast City's Governance format and demand accountability.
2. Expand the land area of the city
3. Integrated transport planning
4. Change in Planning Process
5. Recognising Heritage
6. Inclusionary Housing/ Rent Act
7. Deepen democracy by Public Participation

STAFF AUGMENTATION AND RESIGNATIONS

New Hiring:

02.04.2012

Afreen Shaikh was hired as Library Assistant to assist the Librarian with the sorting, cutting and scanning of the back log and current newspaper clippings in the Research and Resource Centre.

15.05.2012

Rupali Gaikwad was hired as a full time Accountant at the UDRI.

01.07.2012

Amit Devale, B. Arch., was hired as a Research Intern at the UDRI.

01.09.2012

Siddharth Pandit, BE Engineering, MS Computer Science, MA Geography and MUP in International Development, was hired as a Director at the UDRI.

Part time

11.09.2012

Shai Venkatraman was hired on a part time basis as a Communications Consultant for the DP24seven project.

Interns:

19.06.2012

Arjun Mehra, a high school student from the USA, worked as Research Intern at the UDRI for three weeks from 19th June 2012 to 9th July 2012.

14.06.2012

Prateek Mittal, B.Tech. in Civil Engineering, worked as Research Intern at the UDRI from 13th June 2012 to 20th June 2012.

Resignations:

31.03.2012

Kurien Mathew resigned as part time Accountant at the UDRI.

10.06.2012

Ankita Baruah resigned as Associate Director, Development Plan at the UDRI, to take up a Master programme at TISS Guwahati.

30.06.2012

Vedalakshmi Naik resigned as Research Associate at the UDRI to continue further studies at CEPT, Ahmedabad.

17.01.2013

Oshmi Ghosh resigned as Research Intern at the UDRI.

15.03.2013

Deepali Mody resigned as Director – Research Fellowship at the UDRI.

RUPALI GAIKWAD FOR DATA

FUNDING

The Urban Design Research Institute in the last year has continued its efforts to augment its funding base. It has approached many organizations, trusts etc. and made presentations to them regarding the work that is being done in the UDRI. Funding has been a major hurdle in the past year; however the situation has improved since the last few months. **We are pleased that the UDRI is now attracting interest from various funding agencies from all over India and abroad. We hope to translate this to sustainable finance.**

Existing Donors

Over the past year 2013-14, UDRI has strengthened its relationships with existing donors who have committed to its work and mission. The funds received by UDRI, from these existing donors are shown below

Sr. No	Donor's Name	Amount (INR)	Projects
1	Kala Ghoda Association	500000.00	Mumbai Victoria & Art Deco Ensemble as a UNSESCO world heritage site project.
2	V.V. & Smt. K.V. Mariwala Charity Trust	500000.00	Gen. Admin Expenses.
3	Ford Foundation	5437119.87	Information & Communication Infrastructure Projects (ICI).
4	Narotam Sekhsaria Foundation	1200000.00	DP24SEVEN.
5	Charles Mark Correa	500000.00	Printing of "The Champalimaud Centre for the Unknown and Others".
6	Cyrus Jamsheed Guzder	225000.00	UDRI activities.
7	CSD Aden Walla Trust	150000.00	Reprinting of the book "Housing and Urbanization"
8	Asha Krishnanand Savant/ Ganviraj Krishnanand Savant	50000.00	Sandhya Savant Memorial Lecture
9	Mohile Parikh Centre for Visual Arts	33320.00	The Champalimaud Centre of the Unknown and other works and the screening of film into the unknown
10	Narotam Sekhsaria Foundation	1200000.00	DP24SEVEN.
11	Kishore Vallabhdas Mariwala/ Rajen Mariwala	1000000.00	Re-Inventing Dharavi Competition
12	Pirojsha Godrej Foundation	500000.00	Content Management System(CMS)- Research and Resource Centre
13	A.T.E. Enterprises Private Limited	380000.00	General (Marathi Mumbai Reader 14)
	Total	**11675439.87**	

UDRI also made funding proposals to institutional funders for specific projects that it wants to undertake in 2013-14. These funding proposals were sent to

Ford Foundation, New Delhi

UDRI approached Ford Foundation during 2012-13 to explore possible funding and knowledge partnerships for its urban policy and advocacy work. During the successive engagements, a consensus evolved upon the need of advocacy for digital infrastructure in Mumbai's long term development, with a focus on universal access to broadband technology. The UDRI staff, under the guidance of its Trustees, Mr. Cyrus Guzder and Mr. Anuj Bhagwati, worked with Dr. Ravina Aggarwal, Program Officer and Ms. Seema Sharma, Grants Manager for Ford Foundation and submitted a funding proposal and a budget for $200,000 for a two year period 2013-15. The proposal is under review by Ford Foundation and the funding, if approved will assist in developing a policy brief for digital infrastructure in Mumbai's Development Plan (2014-34).

Tata Trusts - Navajbai Ratan Tata Trust and Sir Ratan Tata Trust
In continuation of the plans to build a sustainable source of revenue and funding through corpus, UDRI, in 2013-14, embarked on exploring avenues for corpus funding. The Navajbai Ratan Tata Trust and the Sir Rata Tata Trust have been supporters of UDRI since 2008-09 were approached for possible funding towards a corpus grant for UDRI.

The SRTT after successful completion of the Programatic analysis of the UDRI decided to proceed with the Financial Audit of the UDRI

The NRTT audit was conducted form the 21st of August 2013 to 24th August 2014.

UDRI had submitted funding proposal for three yeart to the SRTT in May 2013 following which the SRTT called the UDRI to give a short presentation about its achievements to the senior Staff of the Tata Trust.

MEETINGS FOR FUNDRAISING
Meeting with Trustee, Sir Ratan Tata Trust Mr. Krishnakumar
Date: - 7th March 2014
Venue: - Bombay House, SRTT Fort Mumbai
Attendees: -
1. Mr. KrishnaKumar
2. Shirin Bharucha
3. Nasser Munjee
4. Cyrus Guzder
5. Nayana Kathpalia
6. Pankaj Joshi
7. Arun Pandhi
8. Jamshed Bamji
9. Omkar Gupta
10. Siddharth Pandit

The SRTT showed great interest in supporting the activities that the UDRI is undertaking for the MUMBAI DP24SEVEN project (the Development Plan Project). SRTT has been funding the UDRI institutionally since 2009 and is pleased with the progress that the UDRI has achieved in opening up the discussion about the Development Plan to the masses.

We are indeed glad that the SRTT also supports the effort of the UDRI to develop a Brand for itself. This will not only help UDRI reach a wider constituency but also is recognized as the key stakeholder in the City for Planning, Design and Governance issues.

The tasks that the UDRI has undertaken are for a substantial time period and need longer time commitment from the donor. The Development Plan project is for the next twenty years and would need continued support from the Tata Trusts, so that the momentum that UDRI has generated would not be abruptly halted. Hence the UDRI should follow up with SRTT for a Corpus grant that UDRI needs to make it sustainable. Further that the other Trusts sharing similar goals such as the Sir Dorabji Tata Trust would also be interested in helping the UDRI reach its target of Corpus.

FINANCIALS 2012-13

THE BOMBAY PUBLIC TRUST ACT 1950
SCHEDULE VIII [VIDE RULE 17(1)]

NAME OF THE TRUST : URBAN DESIGN REASERCH INSTITUTE
REGISTRATION NO.: E-10647 (BOMBAY)

PROVISIONAL BALANCE SHEET AS AT 31ST MARCH , 2013

FUNDS AND LIABILITIES	SCH	RS	RS.	PROPERTIES AND ASSETS	SCH	RS.	RS.
TRUST FUNDS OR CORPUS (Bal.as on 1-4-2011)				IMMOVABLE PROPERTIES : (AT COST)			
				Balance as per last Balance Sheet			
				Add :- Additon during the year			
Balance as per Last Balance Sheet		1,61,005		Less :- Sales during the year			
Adjustment during the year (Give details)		-		Depreciation upto date			-
Addition for the year	A	17,00,900	18,61,905				
OTHER EARMARKED FUNDS :				INVESTMENTS :			-
(Created under the provisions of the trust deed or scheme or out of the Income)							
				FIXED ASSESTS :	C		
Depriciation Fund				Balance as per last Balance Sheet		3,26,746	
Sinking Fund				Add :- Additon during the year		4,65,443	
Reserve Fund				Less :- Sales during the year		-	
Any other Fund				Less :- Depreciation upto date		3,02,533	4,89,656
Scholarship Fund							
Balance as per last Balance Sheet				LOANS (SECURED OR UNSECURED) :			
Addition for the year				Good / doubtful			
				Loan Scholarship			
Building Fund				Other Loans			
Balance as per last Balance sheet							
Addition for the Year			-	ADVANCES :			
				To Trustees			
Loans (secured or Unsecured)				To Employees		48,839	
From Trustees		-		To Contractors			
From Others		40,000	40,000	To Lawyers			
				To Others			48,839
LIABILITIES :							
For Expenses	B	1,56,263		INCOME OUTSTANDING :			
For Advances of fees		-		Rent			
For Duties & taxes		-		Interest			
For Rent and other deposits		-		Other Income - Fees Receivable			
For Sundry credit balances		-	1,56,263	Advance Tax & TDS		1,03,216	
				Deposit others		7,750	1,10,966
INCOME AND EXPENDITURE ACCOUNT :							
Balance as per Balance Sheet		61,75,712		CASH & BANK BALANCES :			
Less :- Appropriation, if any				(a) In current Account with Bank	D	15,70,985	
Add :- Surplus [As per Income & Expenditure Account]		7,23,724		(b) fixed deposit Account		67,29,909	
Less :- Deficit [As per income & Expenditure Account]		-	68,99,436	(c) with the trustee (cash)		7,249	
				(d) With the manager		-	83,08,144
				INCOME AND EXPENDITURE ACCOUNT:			
				Balance as per last Balance Sheet			
				Less:- Appropriation , if any			
				Add :- Deficit [As per Income & Expenditure Account)			
				Less :- Surplus			-
TOTAL			89,57,604	TOTAL			89,57,604

	THE BOMBAY PUBLIC TRUST ACT 1950							
	SCHEDULE VIII [VIDE RULE 17(1)]							

NAME OF THE TRUST : URBAN DESIGN REASERCH INSTITUTE
REGISTRATION NO.: E-10647 (BOMBAY)

PROVISIONAL INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2013

	EXPENDITURE	SCH	RS	RS.		INCOME	SCH	RS.	RS.
To	Expenditure in respect of properties				By	Rent			
	Rates ,Taxes, Cesses					Accured			
	Repairs & Maintenance					Realised			
	Salaries (Executives)				By	Interest			
	Insurance					Accured			
	Depreciation (by way of provision of adjustment)			3,02,533		Realised			
To	Establishment Expenses				By	Interest			
To	Remuneration to Trustee					On Securities			
To	Remuneration (in the cases of a math)					On Loans			
	to the head of the math, including his household								
	expenditure, if any					On Refund tax			
To	Legal & Professional Expenses, if any					On Fixed Deposits Account		4,35,796	
To	Audit Fees & other					On Bank Account		33,420	4,69,216
To	Contribution and Fees								
To	Amount written off :				By	Dividend			
	(a) Bad Debts								
	(b) Loan Scholarship				By	Donations in cash or kind	F		25,57,000
	(c) Irrecoverable rents								
	(d) Other items			-	By	Grants	G		51,41,000
To	Miscellaneous Expenses								
					By	Income from other sources			
To	Amount transferred to Reserve or Specific Funds					Miscellaneous Collections			
To	Expenditure on Objects of the Trust					Other Income		800	800
	(a) Religious								
	(b) Educational				By	Income from the projects	H		1,77,309
	(c) Medical Relief				By	Income from sale of scrap			1,440
	(d) Other Charitable objects	E	73,20,508	73,20,508	By	Income receivable			
					By	Excess provision for earlier year w/back			
					By	Transfer from reserves			
To	Surplus carried over to Balance Sheet			7,23,724	By	Deficit carried over to Balance Sheet			
				83,46,765					83,46,765

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PROVISIONAL SCHEDULES FOR BALANCE SHEET

SCHEDULE - A
ADDITION OF CORPUS FUND DURING THE YEAR

Sr. No.	Item	Rs.
1	AMIT R CHANDRA & ARCHANA CHANDRA	7,00,000
2	NAROTAM SEKHSARIA FOUNDATION	10,00,000
3	PANKAJ JOSHI	900
	Total	**17,00,900**

SCHEDULE - B
OUTSTANDING LIABLITIES FOR EXPENSES

Sr. No.	Item	Rs.
1	Audit Fees	50,562
2	Professional Fees	50,562
3	TDS payable on Audit & Professional Fees	11,236
4	Courier Charges	900
5	Professional Tax	29,200
6	Telephone & Internet Charges	5,279
7	Xerox charges	8,524
	Total	**1,56,263**

SCHEDULE - C

FIXED ASSETS

Sr. No.	Particular	Rate	Gross Block					Depreciation			Net Block	
			As on	Additions		Deletions	As on	As on		As on	As on	As on
			01-04-2012	Upto Oct'2012	After Oct'2012		31-03-2012	01-04-2012	During the year	31-03-2013	31-03-2013	31-03-2012
1	Furniture	0.10	1,55,546	23,143	47,250		2,25,939	15,555	18,676	34,231	1,91,708	1,39,991
2	Air Conditioner	0.15	31,910				31,910	4,787	4,068	8,855	23,055	27,123
3	Office Equipments	0.15	20,790				20,790	3,119	2,651	5,770	15,020	17,671
4	Computer/Printer	0.60	1,25,023	3,61,900	21,150		5,08,073	55,114	2,65,430	3,20,545	1,87,529	69,909
5	Digital Camera	0.15	5,278		12,000		17,278	792	1,573	2,365	14,913	4,486
6	Television & Skype	0.15	49,890				49,890	7,484	6,361	13,845	36,045	42,406
7	Electrical Installation	0.15	27,200				27,200	2,040	3,774	5,814	21,386	25,160
	Total			3,85,043	80,400	-	8,81,080	88,891	3,02,533	3,91,424	4,89,656	3,26,746

SCHEDULE - D
BANK BALANCE IN CURRENT ACCOUNT

Sr. No.	Item	Rs.
1	SBI Mumbai Main Branch	24,038
2	SBI Mumbai Main Branch - NRTT Grant	21,967
3	SBI Mumbai Main Branch- Saving a/c	12,58,772
4	ICICI Bank FCRA A/c	2,66,208
5	SBI Mumbai Main Branch - (Petty Cash a/c)	(0)
	Total	**15,70,985**

PROVISIONAL SCHEDULES FOR INCOME & EXPENDITURE ACCOUNT

SCHEDULE - E
EXPENDITURE ON OBJECT OF THE TRUST

Sr. No.	Item	Rs.
1	Audit Fees	56,180
2	Bank Charges	1,224
3	Books,MAPS,CD & DVD	20,277
4	Catering Expenses	3,750
5	Conveyance	34,557
6	Courier Charges	20,037
7	Designing/ Graphic Charges	2,28,000
8	Documentation Charges	12,595
9	Editing/ Proof Reading Expenses	30,000
10	Electricity Charges	2,07,446
11	Event Expenses	2,78,646
12	Lecture Series	7,200
13	Maintenance Contracts	45,390
14	Meeting Expenses	6,227
15	Newspaper &Periodicals	12,665
16	Office Expenses	86,423
17	Printing and Stationry Expenses	2,68,174
18	Print Work	7,45,679
19	Professional/consultancy Fees	56,180
20	Rates and Taxes	1,942
21	Rent of Office	8,37,152
22	Salaries	38,25,191
23	Staff Welfare Expesnes	28,551
24	Survey in Existing Road	65,730
25	Telephone & Internet Charges	62,175
26	Transalation Cost	2,37,669
27	Transportation Expenses	4,700
28	Web Site Charges	25,000
29	Xerox/Copier Charges	1,11,748
	Total	**73,20,508**

PROVISIONAL SCHEDULES FOR INCOME & EXPENDITURE ACCOUNT

SCHEDULE - F
DONATIONS RECEIVED FOR THE PERIOD APRIL 2012- MARCH 2013

Sr. No.	Name of Trust / Organisation	Rs.
1	ASHA KRISHNANAND SAWANT	50,000
2	V.V.SMT K.V MARIWALA CHARITY TRUST	10,00,000
3	A.T.E ENTERPRISES PRIVATE LTD	3,15,000
4	COSWAJI SHAVAKSHA DINSHAW ADENWAL	3,50,000
5	CYRUS JAMSHED GUZDER	3,12,000
6	MADHU MEHTA FOUNDATION	3,00,000
7	Mr. BHAGIRATH DWIVEDI	1,50,000
8	PANKAJ JOSHI CONSULTANTS	80,000
	Total	**25,57,000**

SCHEDULE - G
GRANT RECEIVED FOR THE PERIOD APRIL 2012- MARCH 2013

Sr. No.	Name of Trust / Organisation	Rs.
1	NAROTAM SEKHSARIA FOUNDATION	22,00,000
2	NAVAJBAI RATAN TATA TRUST	29,41,000
	Total	**51,41,000**

SCHEDULE - H
INCOME FROM PROJECTS / REIMBURSEMENTS

Sr. No.	Item	Rs.
	Sale of publications	
1	Architecture in India	4,320
2	Churchgate Revival	1,224
3	Conservation After Legislation	2,800
4	Conservation Manual	1,184
5	Creating A Tourist District	1,404
6	DP MAPS	945
7	Extreme Urbanism	16,085
8	Heritage & Environment-An Indian Diary	10,173
9	Landscape & Urbanism	29,720
10	Mumbai Reader-06	7,748
11	Mumbai Reader-06(Hindi)	777
12	Mumbai Reader-06(Marathi)	627
13	Mumbai Reader-07	9,232
14	Mumbai Reader-08	9,912
15	Mumbai Reader-09	17,292
16	Mumbai Reader-10	37,302
17	Mumbai Reader 12 (Marathi)	3,200
18	Mumbai Reader 2013	5,400
19	Oriental Building Image	4,000
20	Poster of Building of the Kala Goda	100
21	Public Places	2,584
22	RE Dharavi	5,400
23	Restoring A Banking District	880
25	Image of Rani Bagh	5,000
	Total	**1,77,309**

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ANNEXURES